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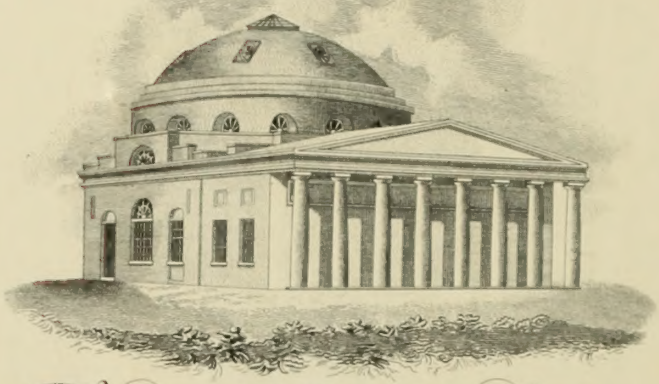

University of Maryland

Md.
Coll.

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

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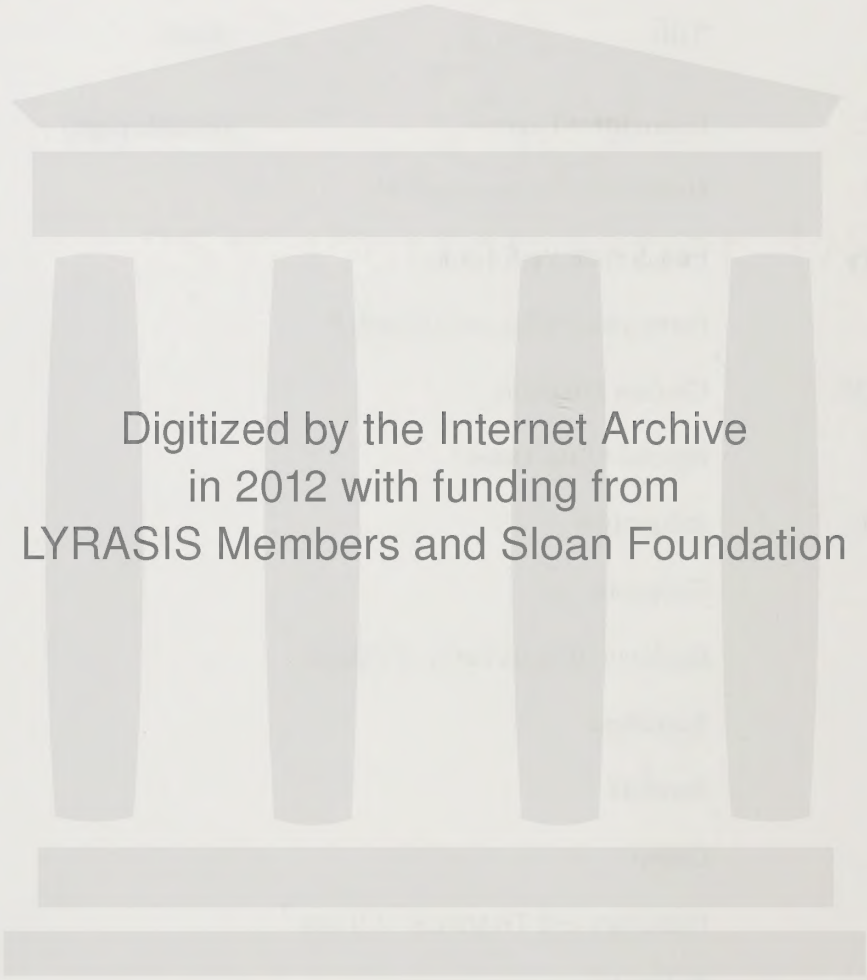
[1] * Text lost in inner margin during binding process.
[2] Slightly faded.

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.



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Author	Title	Notes
Arman, Andrew	Suppuration	
Lanier, Benjamin	Digitalis Purpurea	
Heaton, Albert	Cynanche Trachialis [3]	
Dowler, Bennett	Mercury	
Harper, Samuel	Ascites	
Unknown Author	Partial Dissertation on Dysentery[4]	(no title page)
Fulton, Robert	Physiology of the Liver[5]	
Rench, Samuel H.	Hepatitis	(no title page)
Fort, Alfred Ignatius	Apoplexy[6]	(bound out of order)
Smith, Austin	Gastritis [7]	(title page and p.1 only)
Fort, Alfred Ignatius	Apoplexy	
Unknown Author	Partial Essay or Dissertation	(no title page)
Johnson, Henry W.	Icterus	
Dowling, Henry M.	Jacobi Gregory Medicino Doctoris	
Dugas, Louis Alexander	Nephritis	

[3] Partially faded.
[4] Faded. Incomplete.
[5] Stained.
[6] Four unnumbered pages of Fort's dissertation on Apoplexy found later in this volume.
[7] The rest of the content of this thesis was not found in this volume.

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

Author	Title	Notes
Rowzee, Edward A.	Cholera Infantum[8]	
Dorsey, John C.	Amaurosis	
Watkins, Benjamin	Enteritis	
Ridgely, Richard G.	Dysentery	
McConnell, James	Chorea St. Viti *[9]	
Dunan, Adolphus	Dysentery [10]	
Brodman, Robert H.	Inflammation[11]	(p. 15-24; 1-14)

[8] Title page is partially faded.
[9] Text lost in inner margin during binding process
[10] Folded pages throughout. Ink bleeds.
[11] Bound out of order.

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

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Prince, Anthony W.	Intermittent Fever	8p.
Holland, ~~Griffen~~ Griffin W.	Hydrocephalus Internus	14p.
Diffenderffer, Henry	Eupatorium Perfoliatum	15p.
Waters, Stephen J.	Pertussis or Hooping Cough	16p.
~~Clarvor~~ Clarvoe, John B. H. W.	Cholera Infantum	11p.
Bayly, Walter M.	Injuries of the Head	14p.
Billingslea, James L.	Indigestion	20p.
Rider, ~~Wm.~~ William H.	Cephalitis	14p.
Gilpin, John	Epidemic Bilious Fever of Elkton	23p.
~~Foirman~~ Forman, Alfred J.	Scarlatina	9p.
Simkins, ~~J. J.~~ Jesse J.	Scrofula	22p.
Mitchell, James R.	Croup	12p.
~~Unknown Author~~	~~Partial essay or dissertation~~	~~10p.~~
Keerl, ~~Wm.~~ William	Pathology and Treatment of Burns	5p.
Sutton, James Dorsey	Ophthalmia	7p.
Arman, Andrew	Suppuration	10p.
Lanier, Benjamin	Digitalis Purpurea	8p.
~~Heaton~~ Heaton, Albert	Cynanche Trachialis	14p.
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Fort, Alfred Ignatius	Apoplexy	22p.
Johnson, Henry W.	Icterus	16p.
Dowling, Henry M.	Jacobi Gregory ~~Medicinae~~ Medicino Doctoris	10p.
Dugas, ~~Alex.~~ Louis Alexander	Nephritis	10p.
Rowzee, Edward A.	Cholera Infantum	10p.
Dorsey, John C.	Amaurosis	17p.
Watkins, Benjamin	Enteritis	13p. (1)
Ridgely, Richard G.	Dysentery	13p.
~~Duncan~~, Dunan, Adolphus	Dysentery	12p.
McConnell, James	Chorea St. Vita.	6p.
Brodman, Robert H.	Inflammation	24p.

(1) Bound out of order.

b

On Intermittent fever.

Intermittents are readily distinguished from every other form of idiopathic fever by their occurrence in paroxysms, each of which may be considered as an epitome of a febrile disease, exhibiting in the course of about eight hours all the stages of fever — its rise, progress, crisis, and termination in the recovery of health. The symptoms which occur in the paroxysm of an intermittent fever divide themselves obviously into the cold, the hot, and the sweating stages; in the course of which, the following changes happen in the state of the several functions of the body viz, languor, yawning, stretching, chilliness, shivering, paleness, blue lips and nails, constriction of the skin, pulse small, breathing anxious, and oppressed, sensation impaired, mind weak and restless, or the brain sometimes affected with stupor, coma, apoplexy, and convulsions. The hot stage is usually attended with nausea and vomiting, scanty and high coloured urine, a hurried breathing, considerable headach, throbbing of the

temples, redness and fulness of the face, dry hot skin, thirst, pulse full, bounding, jerking, hard or frequent, tongue furred, confusion of thought, or even delirium. A moisture at length breaks out on the face and neck, which gradually extends over the whole body, and the febrile symptoms then rapidly diminish. The pulse sinks to its natural standard; the feeling of weakness goes off; the heat of skin, headach, and thirst abate; the appetite returns; the secretions are restored to their healthy condition, the urine depositing a lateritious sediment. There is considerable variety in the duration of the paroxysm. It is upon an average, about six or eight hours. After a certain interval the same train of symptoms is renewed, and period of their recurrence gives what is called the type of the fever. From very early times three primary types of intermittent have been observed - the Quotidian, the Tertian, and the Quartan, in which the febrile paroxysm completes its revolution in the respec-

tive

periods of twenty four, forty eight, and seventy two hours. Of these the most common is the tertian. Upon what particular circumstances the type of intermittent fever depends, has never been ascertained; but that climate and season have great influence over it, and also over the general character of the symptoms, cannot be disputed. An ague sometimes continues, particularly in cold climates, to affect the body for a very long period, without producing any permanent derangement of function or structure; but this is a very rare occurrence in hot countries. There the continuance of ague induces inflammatory affections of the thoracic or abdominal viscera and chronic obstructions of the liver and spleen. The circumstances which predispose the body to an attack of intermittent fever have been detailed by writers with great minuteness. The most remarkable of them however are, the concurrence of a cold with a

moist state of atmosphere, the prevalence of an easterly wind, and the night air. Of the last of these, it is highly important in a practical point of view to appreciate the full influence. Weakness of the body either owing to a poor and unwholesome diet, long watching, fatigue, severe evacuations, or previous disease, augments the disposition to ague. Habit, also, or the tendency which previous attacks give to a recurrence of the complaint, predisposes to ague.

The great and important occasional cause of intermittent fevers are exhalations from soil, especially from marshy grounds, called Marsh Miasmata. Moisture alone, though ever so abundant will not produce ague for it is a rare disease at sea, even upon the foggy banks of Newfoundland. The treatment of intermittent fever divides itself into two parts, the palliative and the curative; in other words the treatment during the paroxysms and in the intervals between them.

During the paroxysm, the object of the practitioner is to hasten its different stages, and to relieve urgent symptoms. In the interval, the indication of cure is to prevent its return; and this either by strengthening the body, or more properly by producing such an effect upon it, and particularly upon the nervous system as may prevent the development of fever. In the cold stage, stimulants, warm diluents and the pediluvium may be had recourse to. In the hot stage cold acidulated drink and saline diaphoretics are advisable. Two practices however of a peculiar nature have been recommended in this stage of the disease, ~~which~~ namely, blood-letting and the exhibition of opium. In favour of the former are Doctors Pringle and Hegbow, and Lind speaks highly of the latter. In the interval the indications are more obscure. It is commonly stated, that the object is to guard

to the system; but the acknowledged efficacy of arsenic in the cure of agues does not countenance such an opinion. The precise effect produced upon the body by those drugs which are the most powerful in curing intermittents has not been ascertained. They appear to concur in producing some strong impression upon the nervous system, which prevents the development of fever. This idea is strengthened by the consideration, that the nearer they can be given to the expected period of the paroxysm the more certain is their effect. An emetic administered immediately before the accession of the cold stage is very serviceable.
A strong opiate has frequently succeeded in checking the paroxysm, when in its first approach.
The most generally successful, however, of all the means which have been resorted to for the cure of intermittent fever, is the exhibition of bark and

Arsenic.

The use of bark should be attended by a thorough evacuation of the alimentary canal. It may be taken in doses of two scruples or a drachm, once in two or three hours, so that an ounce may be taken in twenty four hours. During the paroxysm its use must be suspended. Various substitutes for the cinchona bark, native and foreign, have been introduced into the materia medica. They all belong to the class of bitters and astringents; and though attempts have been made to establish chemical differences between them and the cinchona, yet these have thrown no light on the cause of the acknowledged superiority of the latter. Among the best substitutes for the cinchona bark may be reckoned the cusparia, quassia, different species of salix and dogwood, and the root of calamus. Of the mineral substances employed in the cure of this disease, the most

powerful is undoubtedly Arsenic, the efficacy of which has been ascertained by the most ample experience. It has been given the form of the Liquor Arsenicalis, and in the dose of five drops gradually augmented. After a certain length of time, sometimes indeed from the first, it will produced nausea and vomiting, when its exhibition must be suspended, and a few grs of Rhubarb given. Under proper management Arsenic will be found, next to bark, the most generally useful of all the medicines which have recommended in the treatment of intermittents; but its administration requires the same cautions as that of bark. With respect to the treatment of intermittents generally, Professor Potter in his lectured remarks, that the great defect in the treatment consists principally in the early and persevering use of tonics and stimulants.

Finis.

termination after effusion operation?

An Inaugural Dissertation on Hydrocephalus Internus

Submitted to the examination of the Rt. Revd James Kemp Provost, Trustees, and Medical Professors of the University of Maryland

by Griffin W. Holland.

Honorary Member of the Medical Society of Baltimore

March 22nd 1827

To

Doct. Samuel Baker, Professor

of Materia Medica, ~~Therapeutics,~~

~~and Botany~~ in the University

of Maryland.

The following pages the Inaugural fruits

of a Medical education, conducted partly

under his care, are with sentiments of

the highest veneration for his talents,

respectfully dedicated as a tribute of

friendship, gratitude, and esteem

by his pupil—

Griffin B. Holland

Introduction.

Hydrocephalus (the subject of my inaugural dissertation) from the formidable aspect which it presents, and the fatal consequence which almost invariably attends it, prompts me on this occasion to make investigations which have hitherto escaped that attention which it so justly merits. The delicacy and vital importance of the organ assailed by this disease together with the numerous cases with which practitioners have to contend, render it not only deeply interesting to the pathologist, but highly important to the practising physician.

The disease has been so minutely viewed and ably discussed by professional men, that a prospect for the display of ingenuity & originality of thought is almost entirely

denied me. I must therefore be pleased to
concentrate in the following pages the
results of my own limited observations,
together with the thoughts of others,
rather than launch on the ocean of theory
where sound judgement is so often obscured
by the airy flights of imagination.

Character of the disease.

The term "Hydrocephalus" is no doubt a very ancient one, and one peculiarly expressive and appropriate, signifying a collection of water within the Cranium or walls of the head. The disease is almost peculiar to Children being rarely known to extend beyond the age of twelve or fourteen.

"Hydrocephalus" has usually been divided into two Species, external, and internal, the first effecting the meninges and the latter the ventricles or parenchyma of the brain.

The pathology of "Hydrocephalus Internus" or that Species to which I shall more particularly direct my attention, has received the scrutiny of various writers and has produced as the world reasonably suppose, no little controversy in the Medical world

Dort Cullen (who may be justly styled the father of Modern physic) viewed it as an evident and idiopathic species of Apoplexy, and placed it under his genus Comata or top of voluntary motion, and hence has distinguished it under the appellation of Apoplexia Hydrocephalica, and thus he assigned it a local habitation and name. In reference to this arrangement he however observes "That in nosological works it is difficult to collate diseases that in their progress assume a changeable form and hence to allot a suitable place for Hydrocephalic Apoplexy. Yet he prefers placing it under the head of Apoplexy for the following reasons, - to giving it a distinct situation in his nosology. First, that it differs from Hydrocephalus externus, and secondly, that in its proximate cause and next, in its symptoms it bears to apoplexy as near a relation as possible, though Dort Cullen thinks the symptoms so evidently alike." I think his

definition quite enough to convince any one of its little connection with Apoplexy, it is as follows "Apoplexy arising gradually affecting infants and the age below puberty with lapitude pain of the head, afterward with slow pulse ditation of the pupils and somnolency."

From the observations of various writers as Doctors Zeddors, Withering, and Rush the incipient and most evident symptoms are those of fever which is therefore the fundamental part of the disease, and hence it has been placed under the Clap pyrexia and regarded as a fever, or inflammation, or what I would prefer as a mild or Chronic encephalitis, producing not only an effusion from the debilitated blood vessels, but impairing the function of those vessels & the absorbents which are so highly important in the economy of the system, hence it has been called Phrenicula Hydrocephalica.

Symptoms. The progress of the disease has usually been divided, and I think very properly into three stages. The first is attended by an increased or inflammatory action of the brain, and is marked with many of the usual symptoms of fever.

The patient is first attacked with languor and inactivity, often drowsy and peevish, but at ~~first~~ intervals cheerful and apparently free from all complaint, the appetite is weak but in many instances a nausea and vomiting occurs twice or thrice a day, and the skin is observed to be hot and dry towards the evening, soon after these symptoms have appeared, the patient is affected with a sharp head-ache, chiefly in the forepart or if not generally in the crown of the head, it is however confined sometimes to the side of the head, and in that case when the position of the body is erect the head often inclines to the side affected, we frequently find also that the headache

alternates with affections of the stomach, the vomiting being less troublesome when the ~~headach~~ pain is most ~~troublesome~~ excruciating and vice versa, other parts of the body are likewise subject to temporary attacks of pain, as the extremities, the bowels, but more commonly the back of the neck, and between the scapula, in all such cases the head is more free from uneasiness.

At this period of the disease the patient dislikes the light, cries much and sleeps little and when he does sleep he grinds his teeth, picks his nose, and appears to be uneasy starts often screaming as though he were terrified, the bowels are in a majority of cases very much confined, though it sometimes happens that they are in an opposite state, the pulse in this early stage of the disease does not indicate any material derangement, when the symptoms mentioned have continued a few days

subject as they always are to great fluctuation
the axis of the eye is found to be turned inward
towards the nose, the pupil on the side
affected is found to be more dilated than the
other, and when both eyes are affected the
pupils are larger than they appear to be
in the eyes of healthy persons, the vomiting
becomes more frequent and the [redacted]
more excruciating, every symptom of fever
now takes on a appearance, the pulse is
frequent, and the breathing quick
exhalations of fever take place towards the
evening, and the face is occasionally flushed
[illegible] cheek is much more flushed than
the other, temporary perspirations break
forth which are not followed by any
alleviation of distress, a discharge of blood
from the nose which sometimes appears about
this time is equally unfrequent, at this
period of the disease delirium of the
most violent kind comes on and with

all the preceding symptoms of fever it continues to increase until about the fourteenth day, the disease then undergoes that change which points out the commencement of what has been called the second stage, the pulse becomes flow and unequal both as regards its strength and intervals between the pulsations, the pain of the head or whatever other part is affected abates, or at least the patient becomes apparently less sensible of it. the interrupted slumber or apparent ~~wakefulness~~ drowsiness which prevailed during the earlier periods of the disease are now succeeded by an almost lethargic torpor. the flabbiness or dilatation of the pupils increase, the patient lies with one or both eyes half closed which when minutely examined are often found insensible to light, the vomiting ceases, and whatever food or medicine is ~~given~~ offered is swallowed with apparent

vorancy, the bowels at this period are generally obstinately costive. If every effort made by art fails to prevent the sinking powers of ~~[illegible]~~ life, the symptoms called the second stage are soon succeeded by those denominated the third, which more certainly announces the approach of death, the pulse in this case again becomes equal but so weak and frequent that it is almost impossible to count it, a difficulty of breathing occurs almost resembling a stertor apoplectics, sometimes the eyes are suffused with blood, the flushing of the face is more frequent than before but of shorter duration, and followed by a deadly paleness, red spots or blotches sometimes appears on the body or limbs, deglutition becomes difficult, and convulsions ~~[illegible]~~ in a short time close the sum.

Causes

Those causes which produce Hydrocephalus, act either directly on the brain or indirectly through the medium of the general system.

Those which act directly on the brain are falls, or blows upon the head, certain positions of the body, as in childish plays which bring on congestion, and inflammation and afterward an effusion of water within the cranium or brain.

Indirect Causes. There are more numerous and frequent than those mentioned. The following diseases of the whole system appear to act indirectly in producing Hydrocephalus Internus, All inflammatory affections, or Intermitting, Remitting, and Continued fevers, all the eruption fevers, Catarrhal affections. Typhus fever, Rheumatism, Phthisis Pulmonalis, and worms. From the depositions of Lentaud, Quin, and others it appears

that Hydrocephalus Internus has succeeded each of the following affections. Colic, — Palsy — Melancholy — Dysentery — Dentition Scrofula — the sudden healing of old sores and insolation, of the last two cases have been known by Dort Rush.

Cure. The mode of practice in consequence of the discrepancy of opinion, of the pathology of the disease, has been very undecided. While many practitioners have been so dispondent as to fear that every plan has been equally unavailing.

Considering the disease a Cephalitis it is necessary to pursue the usual measures for inflammatory affections; with a very slight addition. In the first instance blood should be drawn freely from the arm, or temporal artery — if it be not practicable to take it from the arm, the epistaxis of leeches is frequently necessary, the head should be shaved and napking —

dipped in ice water, or vinegar and water applied to the posterior part of it, and changed every hour, or half hour, the bowels should be fairly purged with Calomel in v or xqs doses and sometimes assisted by Jalap. A gentle diaphoresis should be excited and if possible maintained on the skin. the Chamber should be large and well ventilated, at the same time the light should be partially excluded. And when it is proper to stimulate the head, epithems of neutralized ammonia should be preferred to blisters, The value of Digitalis has been much spoken of though I think its effects doubtful. When used early in the disease it has appeared serviceable though it should always be avoided in the second stage.

Mercury employed externally, and internally to excite a ptyalism has also been

and in many instances with great fatality
both among adults and infants, but more
particularly with the latter.

An

Inaugural Dissertation

on

Eupatorium Perfoliatum,

Submitted to the consideration

of

The Rt. Rev. James Kemp D.D. Provost,

and of the

Trustees, the Medical Professors

of the

University of Maryland,

for the degree of Doctor of Physic.

By

Henry Diffenderffer,

of

Baltimore.

March 1827.

Essay
on
Eupatorium Perfoliatum.

"Let me recommend to your particular attention the indigenous medicines of our own Country."

Rush

The plant which I have chosen for the subject of this Essay, is one which has for some time past attracted the notice of the Medical World in a considerable degree, as a valuable remedy in many of those distressing and painful diseases with which the human race are afflicted. I cannot help observing here that the investigation of the properties of the indigenous plants of our own Country, has in a great measure become incumbent on us; independent of the pleasure which the study of botany must afford to the enlightened mind, particularly in a Country like ours, whose wide and unexplored fields offer such ample scope for Scientific research, we are

at times compelled to seek for substitutes, especially in country Practice, for those exotic medicines, which our peculiar situation, renders sometimes difficult to procure. Professor Barton when speaking of tonics, observes that the countries of the United States are so rich in bitter vegetables, that there can be no necessity for having recourse to the foreign articles of this class, especially when such articles are only to be procured at a high price, a circumstance which not unfrequently, becomes a source of the adulteration of medicines in this and other Countries.

My attention was first directed to the Eupatorium Perfoliatum as forming a valuable acquisition to the Materia Medica, by a distinguished Practitioner of this City, to whom I am indebted for some very valuable cases of its efficacy in the cure of disease.

The Eupatorium Perfoliatum is a very common plant in most parts of the United States, In Maryland it abounds, It grows principally

in low meadows and marshy places, and along the banks of running waters. It is an annual plant producing stalks, from two to five feet high. The stalks are covered with down. The leaves are horizontal, serrated, rugose, gradually tapering off from the middle and from four to six inches in length and from an inch to an inch and a half in breath near the stalk, at which place the leaves appear to be perforated by the stalk, and hence its names of Thoroughstem &c. Each alternate row of leaves arise from opposite sides of the stalk, and appear when the end of the stalk is held towards you, as if they decussated each other, hence another of its names viz. Crosswort. - The upper surface of the leaves is of a dark green colour; the lower is of a paler hue. It begins to flower about the middle of August, and continues evolving 'till about the middle of October. The flowers are of a dirty white colour, collected into large corymbs at the termination of the branches. The Plant is well

known to the country people by a variety of names, viz Bone Set, Indian Sage, Thoroughwort &c, and from its well known sudorific and Emetic qualities, has been used by them as a domestic remedy, in many of their diseases, particularly Intermittents. It is well known to some of the northern Indians, by the name of Ague Weed. After the very clear and accurate description which has been given of it by the numerous writers on Materia Medica, the plant must be so well known, that I deem it unnecessary to say any thing further of its natural history. I shall therefore, after speaking of its Pharmaceutical treatment confine myself principally to its effects when given as a remedy for disease.

Pharmaceutical Treatment. The most proper time for gathering the plant, is about the latter end of August, when the flowers are full blown. It should be cut close to the root, and hung in a dry place, exposed to the air, it looses little or none of its virtues

by drying. The flowers, leaves & stalks may be employed in Medicine, but from the experiments of Doctor Anderson of New York, it would appear that the leaves are the most active part of the plant. It may be used in the form of decoction, Infusion (hot or Cold), Tincture or in substance. As a tonic bitter, Professor Barton believes the flowers superior to the Anthemis Nobilis. according to Doctor Eberle the Medicinal qualities of this plant appear to reside in its bitter Extractive, which is equally soluble in water and alcohol.

If we were allowed to judge from its active qualities (which, are those of a tonic, sudorific and Emetic) we would naturally suppose that the Eupatorium would prove a valuable remedy in many diseases, and accordingly we find that it may be used with great success in Remittent and Intermittent Fevers, Cutaneous diseases, and in Pneumonia Typhoides. &c

Of its use In Intermittent & Remittent Fevers.

Its efficacy in the cure of Intermittent fevers, is said

by some, to exceed that of the bark. However partial I may be supposed to be towards the Eupatorium, I certainly do not think that it can be compared to the bark in the cure of those fevers. There is however one advantage to be derived from its use in Intermittents which Doctor Anderson appears entirely to have lost sight of viz. That it may be given during the hot stage of the paroxysm not only with impunity (which cannot be said of the bark) but with manifest advantage. When given at this period, from its powerful determination to the surface, it brings on the sweating stage, and thus shortens the paroxysm.

Although I do not think it equal to the bark; it may nevertheless be considered an excellent substitute for it on many occasions, as the following cases selected from a number of similar ones, will abundantly testify.

Sept. 3d Eliza P—— a child Ten years of age has been sick ten or twelve days of an Intermittent fever, the paroxysm of which comes on at noon of every other day, has taken nothing as yet for it.

Her tongue is very foul, pulse full and quick, no appetite, with nausea and frequent inclination to vomit, bowels costive — directed an emetic of Tartarized antimony to be given immediately, and a cathartic of Senna, Manna & salts, the next morning.

Sept. 6th The emetic has discharged a great deal of bilious matter, and the cathartic has operated five or six times — the tongue is tolerable clean, no nausea or inclination to vomit, Fever came on to day as usual, directed a decoction of the Eupatorium of ℥vj to the pint of water, a wine glassfull cold to be taken every two hours.

Sept 7th To day the fever ought to have returned, but she escaped it, felt somewhat chilly about the hour on which it usually came on, but this soon disappeared, directed the Eupatorium to be continued.

Sept 9th She has again missed her fever, — appetite returning, bowels gently open. Directed her to continue the Eupatorium a few days longer.

Sept 8th Thomas ——— about Twenty five years of age, had been seized two days before with a fever

of the Intermittent Kind; The paroxysm came on every day about 2 Oclock in the afternoon, and continues until about 8, Pulse full & quick, face flushed, Violent pain in the head, giddiness, and pain in his limbs, thirst very great, no appetite, tongue foul and bowels costive,- directed him to lose ten ounces of blood.

Sept 9th - Has experienced but little relief from the bleeding, Fever came on to day at the usual hour - directed an emetic of Tartarized Antimony to be given him immediately, and in the morning a cathartic of Senna, Manna & Salts.

Sept 10th. The emetic and cathartic had acted pretty freely, but the nausea & inclination to vomit still continues; directed the emetic to be repeated.

Sept 11th A large quantity of bile was discharged by the emetic, and he feels much better, tongue still foul, bowels costive &c, directed the cathartic to be repeated.

Sept 12th The cathartic has produced five or six copious stools and the patient finds himself much better, Pulse nearly natural, tongue

clean, bowels regular, no headache or pains in the limbs, directed a decoction of the Eupatorium; of ℥ij to a pint and a half of water, a wine glass full cold every two hours, to be continued through the Intermission, and as the Fever was just coming on, directed a wineglassfull warm to be given him immediately which acted as a mild emetic, and was soon succeeded by a moisture on the skin, which appeared to shorten the paroxysm considerably.

Sept 13th. Notwithstanding the favourable symptoms of yesterday, had a return of the paroxysm to day, but of much shorter duration than usual, It came on about 8 Oclock and left him at nine, continued the Eupatorium.

Sept 14th. He has missed his Fever to day, and feels considerably better, Pulse regular, skin moist, tongue clean, bowels open, no pains in his head or limbs, directed him to continue the Eupatorium.

Sept 19th. Has had no return of his Fever since the 13th. appetite very good and mending fast. Has left off the use of the Eupatorium.

Sept. 20th John ——— Has been sick two days of an Intermittent, the paroxysm of which returns every day about 2 oClock in the afternoon and continues untill seven or eight in the evening. The Pulse is full and slow, tongue foul, bowels costive, violent headache, and giddiness with pains in his limbs, Has not taken any medicine, directed him to take six purgative pills.

Sept. 21st The pills vomited him once, and produced four or five evacuations by stool, The matter thrown up by vomiting, was of a thick tenacious consistence. Is much the same to day as yesterday; directed an emetic of Tartarized Antimony to be given him.

Sept. 22nd The Emetic has operated very well, since which he feels much better; Fever is just coming on, directed Pulvis Eupat: xx. gss every two hours and repeated. It was soon succeeded by a gentle nausea & moisture on the skin which appeared to shorten the Paroxysm considerably.

Sept. 23rd Feels considerably better to day; appetite returning; notwithstanding which, his fever returned

as usual. continue the Eupatorium.

Sept. 26th. She missed his fever on the 24th but had a return of it on the 25th directed the dose to be increased to XXV grs. every two hours.

Sept. 29th Has had no return of fever since the 25th his pulse is natural, bowels regular, appetite very good &c &c. Left off the use of Eupatorium.

Of the use of the Eupatorium in Remittents and Malignant Yellow Fever. I can say nothing from my own experience, but we have the authority of some of the most eminent Practitioners of its efficacy in those cases.

Cutaneous Diseases. The Eupatorium has been used with great benefit in a distressing herpetic affection very common in Virginia, and known by the name of "the James River Ringworm" from its being most prevalent among the Inhabitants residing upon the upper streams of James River.

Dr Barton says that, The Patient drank a decoction of the plant and continued the use of it

for a considerable time. It sometimes puked, it no doubt purged, and in all probability it operated as a sudorific. But by what quality it more especially operated, in curing the disease, I am unable to say.

Not being in a situation in which I could have an opportunity of testifying its efficacy by my own experience, I acknowledge with gratitude that I am indebted to the kindness of a friend of mine for the following case.

Catharine ——— three years of age, afflicted with a disagreeable eruption on the face of the Herpetic kind, which had made its appearance about two weeks before, and had continued spreading until it had nearly covered the face. Previous to commencing the use of the Eupatorium, I directed the bowels to be evacuated by a dose of Jalap & cream of tartar, after which a decoction of Eupatorium of ℥ij to the pint of water to be taken in the course of two days. A strong decoction

to be used externally at the same time, as a wash, and both to be continued.

August 9th The Salaps & Cream of tartar had operated very well. The Eruption has assumed a yellowish appearance and appears to be drying. The medicine agrees well with the stomach; keeps the skin generally moist, and the bowels gently open, continue the Eupatorium.

August 20th The Eruption has entirely disappeared, and the child enjoys better health at present than it did for a long time previous.

Gutta Rosea or Pimpled Face. This is sometimes a great Eye sore, to the female part of the community, who frequently injure their faces from the too liberal use of Cosmeticks, recommended and vended by every Quack. The Eupatorium has been found very successful in this disagreeable affection, when taken internally in the form of Infusion, and a strong decoction used externally as a wash. But in all cases of Eruptions on the skin,

the state of the digestive organs should be particularly attended to. It is often the source of the most obstinate Cutaneous diseases, and unless due attention be paid to this, our Medicines instead of relieving, rarely fail of aggravating the disease.

Pneumonia Typhoides The Eupatorium is recommended by Professor Potter as a stimulating diaphoretic, and no doubt will be found useful in this disease, as well as many other diseases where stimulating diaphoretics are used.

From the successful employment of the Eupatorium in Intermittents &c. We might a priori conclude that it would be employed with advantage in many cases of Dysentery. We sometimes find that after the most violent symptoms of this disease have been removed, that a discharge from the bowels & tenesmus continues from mere debility and relaxation of the Intestines unaccompanied by any material gripings or febrile symptoms.

In such cases tonics have been highly recommended, as Bark, Quassia &c. I am inclined to believe that the Eupatorium would be more beneficial in such cases than either of the medicines just mentioned; for independent of its tonic quality, it is also a powerful sudorific, and Doctor Mosely declares that Bark is not a more powerful remedy in Intermittents, than Sudorifics are in Dysentery.

An

Inaugural Dissertation

on

Pertussis or Hooping Cough

Submitted to the examination of the Rev. Revd. Jas. Kemp D.D. Provost

and the

Trustees and Faculty of Physic

of the

University of Maryland

for the Degree of

Doctor in Medicine

by

Stephen. J. Waters.

of

Maryland

April 2d ~~March 20th~~ 1827

Pertussis or Hooping-cough.

This disease is a convulsive cough,
interrupted by a full and sonorous inspiration, and
returning in fits that are usually terminated by a
vomiting or expectoration.

In its first stage, it may be considered a febrile
disease. Children are most commonly the subjects
of pertussis; and it seems to depend on a specific
contagion, which affects them but once in their lives.
The disease being produced, the fits of coughing are
often repeated without any evident cause; but in many cases
the contagion may be considered as giving the predisposition,
and the frequency of the paroxysms, may depend upon various
circumstances

exciting causes; such as violent exercise, a full meal, the having taken food of difficult digestion, and irritation of the lungs by dust smoke &c: emotions of the mind may likewise prove an exciting cause.

Pertussis, it has been said by some, is not a contagious disease; but this is an error; certainly it is not produced by contact, or touch, as the itch is; but by effluvia inhaled into the lungs. Pertussis often prevails epidemically, but does not in this respect, seem to be influenced by any particular season of the year.

It has however been observed to be much milder in warm climates, than in cold ones, and it would seem in conformity to this law, that the disease is found to be more mild in this country, during Spring and Summer, than during the autumn and winter months.

The proximate, or immidiate cause cause of pertusis, seems to be a viscid matter or phlegm, lodged upon the branchia, trachea and fauces; which adheares so closely, as to be expectorated with the greatest difficulty.

This disease usually comes on, with an oppression of breathing, some degree of thirst, a quick pulse, and other slight febrile symptoms; which are succeeded by hoarseness, cough, and difficulty of expectoration.

These symptoms continue perhaps for a fortnight or more, at the end of ~~xxx~~ of which time, the disease puts on its peculiar and characteristic form, and is now evident as the cough becomes convulsive, and is attended with a peculiar sound, which has been named a whoop.

The approach of pertusis is so similar to that of common catarrh, that if it does not appear as an epidemic

it is very difficult to distinguish from that disease.

When the sonorous inspiration has taken place the coughing is again renewed, and continues in some manner as before, till either a quantity of mucus is thrown up from the lungs, or the contents of the stomach are evacuated by vomiting. The paroxysm is then terminated, and the patient remains free from any other for some time, and shortly after returns to the amusements he was employed in before the accession of the fit, and expresses a desire for food, and when it is given him takes it greedily.

In those cases however, where the attack has been severe, he often seems much fatigued, makes quick inspirations, and is rather faint.

On the first coming on of the disease, there is little or no expectoration, or if any, it consists only of a thin mucus

and as long as this is the case, the paroxysms of coughing are frequent and of considerable duration; but on the expectoration becoming free, and copious, the fits of coughing are less frequent, as well as of shorter duration.

By the violence of coughing, the free transmission of blood through the lungs is interrupted, as likewise the free return of blood from the head; which produces that turgescence, and suffusion of the face, which commonly attends the attack; and in some instances, brings on hemorrhage either from the nose or ears.

The disease having arrived at its height, usually continues for some weeks longer, and at length goes off gradually; In some cases however, it is protracted for several months, or even a year.

Altho the hooping cough often proves tedious, and is

and is liable to return with violence, on any fresh exposure to cold, when not entirely removed; it never the-less is seldom fatal; except to very young children, in whom it is mostly alarming from its tendency to produce convulsions, suffocation, apoplexy, inflamation of the brain, ruptures and incurvation of the spine.

In adults, it excites pneumonitis, more frequently than in children; and in pregnant women has often led to abortion.

A moist skin, warm extremities, open bowels, plentiful expectoration, and free vomiting, are favourable symptoms.

It has been known in some instances to terminate in apoplexy, and suffocation; frequent hemorrhage protracts the disease, and if it proceed from

the lungs, a foundation will often be laid for Phthisis.
Children who have been put fasts on annual food
soon, generally have the disease in an agravated form.
and also those who have a predisposition to phthisis.
Dessections of those who die of whooping
cough, usually show, that the organs of respiration
have been affected, and particularly those parts
which are seat of catarrh.
In many instances the lungs have exhibited highly
morbid appearances, the trachea and its ramifications,
bearing the marks of recent inflamation, and the air
cells, and the bronchia near to their bifurcation, filled
with whitish, purulent, looking mucus.
Serous accumulations in the pericardium are
frequently met with.

When the disease has been long protracted, or has degenerated into pulmonary consumption, the glands of the mesentery are found in a hard, and enlarged state.

Treatment. Dr Cullen, in laying down his mode of treatment, divides the disease into two stages. The first consists of that part of it, during which he supposes the contagion to be present and operative, which possibly may include the three first weeks.

The second, embraces the remainder of its duration.

In the treatment of pertussis, we are in the first or early stage, to moderate its violence, and palliate its urgent symptoms; and at an advanced period, to arrest its progress, and put a stop to it by

suitable remedies, sooner perhaps than it would spontaneously have ceased.

Where the disease takes place in a child of a full plethoric habit, and is accompanied with difficulty of breathing, full pulse, and other febrile symptoms, we should always premise venesection; which operation may be repeated after a time, if the degree of dyspnoea is not lessened; but in common cases, where no such symptoms prevail, bleeding will not be necessary.

The body being usually costive, it will be necessary to have recourse to gentle laxatives, such as an infusion of senna, with manna,

remove it. In many instances, an attention to diet, may probably be sufficient to answer the purpose of removing, or preventing this symptom. And therefore stewed prunes, roasted apples, figs, honey, sugar &c, may be given, which things children take very readily.

Emetics frequently administered, have been found the most useful of all remedies in this disease; their action tends equally to interrupt the return of the paroxysm, and to keep the lungs unloaded, by producing a determination towards the surface; they do not put a stop to the disease, but they lessen its violence, and remove the difficulty of breathing.

They may be employed in all states of the disease

except the congestion. And as children may be easily deceived by what has no appearance of medicine, a solution of tartarized Antimony, seems the most proper for the occasion.

Antimony has been famous in this disease, since the time of Dr Rotherjel.

In this manner, we are to guide the the patient through that part of the disease, which we may rationally suppose to be kept up by the stimulus of contagion. In its latter part, or second stage, in which a morbid habit alone, is in all probability the irritative power, a different course is demanded.

We have now nothing more to do, than to oppose the Spasmodic habit, by an antispasmodic

rocess. A sudden and violent emotion of the mind, a overwhelming terror, is well known to have had this effect.

But such a remedy is not to be recommended, and hence different tribes of medicines have been resorted to, which may be arranged under the three divisions, of, narcotics, for the purpose of taking off the morbid irritability of the effected muscles; Stimulants, for the purpose of local or general revulsion; And Tonics, for the purpose of invigorating the general system.

The narcotics chiefly made use of, or recommended, have been opium, hyoscyamus, belladonna, conium &c.

The conium, has acquired a high degree of public

favour, for which it is chiefly indebted to the writings of Dr Butter, who represents it as having the double virtue, of retarding the convulsive paroxysms, and of mitigating their violence; and on this account he prescribed it through every stage of the disease.

Musk, has been tried in all proportions, and with very different effects, both abroad and at home; but the effects it is stated to produce, are so various, and indeed contradictory in different individuals, as to prevent confidence in its use.

The artificial musk, obtained by mixing nitrous acid with oil of amber, appears in many instances to have been as successful as the best and most genuine musk; and is hence well entitle to attention from its comparative

cheapness. The internal employment of lead, has been recommended. It was first recommend
d I believe by Dr Forbes of Edinburgh, who
used the liquor Subacetatis, or Goulard's well known
extract, and speakes highly of its success.
The stimulant plan, if it have not been more
successful than the sedative or narcotic;
has at least been as powerfully recomm
ended.
Its intention, I have already stated to be,
that of taking off the propensity to spasmo
ic action in the trachea; by exciting a
general or local revulsion; the medicines
chiefly employed for this purpose, have been
cantharides, ammonia, ether, camphor and

hus vernix. When blisters were formerly
mployed with great freedom in hooping coughs,
was thought, to be ascertained, that they always
nswered best when they irritated the bladder,
nd occasioned strangury. Accordingly Compra
tioners, have endeavoured to produce the latter
ffects, without the pain of the former; and have
or this purpose, employed cantharides in tincture.
Where the intention is, to divert the tendency to
onvulsive action by local revellents, it would be
etter perhaps to employ them externally; particularly on
he chest and down the chain of the spine.
The most common stimulants for this purpose, are garlic,
camphor, Ammonia, ether, and the essential oils of amber,
d turpentine, which in different exhibitions, have

ng been used, and still preserve their reputation; the practice seems first to have been tried in Poland.

Many elementents have been employed internally, for the purpose of producing an excitement generally; and thus acting as universal revellents, as camphor, ammonia, and various preparations of both sulphuric and nitric ethers. The shin varnish comes strongly recommended by many foreign writers, as a elementent antespasmotic, of considerable power.

After all, perhaps the best antispasmotics are tonic medicines, and a tonic regimen. Dr Cullen trusts almost exclusively to the chona, this no doubt, would be a valuable medicine in pertussis combined with an intermitting form of fever; The best, and most convenient form of the bark for children, is the sulphate of quinine.

he mineral tonics, are medicines of great importance in
ond or last stage of pulmonis; such as the oxyd and sulphate of
, carbonate and sulphate of iron, and nitrate of silver. The pre-
ations of arsnic have also been employed, and are said to
e proved highly serviceable. Prussiac acid has a fair
m to trial — As an important part of our tonic plan,
may recommend change of air, and especially removing
warmer climate, or from the interior to the sea coast.
n a case which came under my own observation, the
d bath was employed with decided advantage.
Mercurial ptyalism, is said to have rendered the dis-
more mild: and Vaccination has also been recom-
nded with the same intention; but their efficacy
doubted by some. I think them however well
orthy of trial

An inaugural Dissertation

On the

Cholera Infantum.

Submitted to

The Revd. James Kemp Provost.

and the

Faculty of Physick.

of the

Univerty of Maryland

For the

Degree of Doctor of Medicine

by

John. B. H. W. Clarvoe. of Maryland

March 11 1827

On the Cholera Infantum.

This disease furnishes to the ingenious and inquisitive Physician a subject for investigation of peculiar interest. most of the diseases which "flesh is heir to" have received the attention of the profession to such an extent that almost every field of medical inquiry has become a trodden and well beaten path. But, comparatively speaking at least, the subject of our dissertation is novel and untouched. The practical systematic writers of other Countries are almost universally silent upon it. and the few professional gentlemen of our own Country who have noticed it have not succeeded in fully explaining the subject, at all events, to a sufficient extent to banish that discrepancy of sentiment which is so unfavorable to our uniform and successful practice. Another point of interest is that the Cholera Infantilis is a disease indigenous to our own Country and may be said from its Comparatively recent origin to be a new disease — until

about a half of a Century ago it was unknown-
in this view the american Pathologist has much
to excite his interest and stimulate his inquiry
and ambition - It has been said of our Country
sarcastically that it is "the Land where fancy-
sickens and where genius dies." However we
may satisfy ourselves that this opprobrious reflec-
tion is unjust and false, yet we owe it to the
world and to our Country to prove it so to other
nations. Let every one in this cause labour in his
own department and this american disease
opens a favorable field for Labour to our profes-
sional Countrymen to distinguish themselves to
the same end. Our Character as a Nation in a
literary point of view has been amply redeemed
in some respects and american genius has ex-
torted the reluctant plaudits of those who have
hitherto regarded us with an inordinate eye -

Physicians have still much to do. From the mixed character of the profession in this country and other causes the Faculty perhaps are more underated than any other class of our Fellow Citizens. Here then is a subject upon which gentlemen may reflect back some of that flood of light which has been poured upon our shores by foreign talent. This is one invention but a nobler and higher is the subserving the cause of suffering humanity. a principle that should ~~be~~ ever be paramount in the breast of scientific men and above all others excite them diligent inquiry and manly exertion.

The Cholera Infantum, is a new disease appearing in the middle section of our Country about the end of June or first of July and Continuing all summer. It is a disease of indirect debility of the stomach and upper part of the small intestines which become congested and sometimes Mortify. It is caused by Heat and Moisture with bad Ventilation. It attacks

Children from two weeks old to two years. It is excited by weaning, teething coarse and bad food &c. and hence occurs most commonly in the second summer, Dr Potter says that in 1816, there was a death almost every Month, and he saw nothing of this disease; when the weather changes from Hot to Cold no more cases occur, and those that are sick immediately improve. It is not attended with much fever, and that is of the Continued form, Marsh Effluvia has nothing to do with this disease, for in the Month of September when the diseases of Marsh Effluvia prevail most, the Cholera Infantum disappears, It does not prevail about Marshes but on large open Farms and in Cities particularly in their large and open streets & open & damp suburbs. the dry narrow alleys are most exempt from it by their being more shaded, the disease is sometimes Inflamatory and then the head becomes affected and the patient is comatose, this circumstance

has caused some to Consider it Hydrocephalus In-
ternus. By the symptoms & by its often being attend-
ed by a perspiration it is distinguished from dys-
entery for some of the vessels of the mucous Intestines going
way the Evacuations are bloody. Dysentery besides
is seated in the Large Intestines. It is often Cured
by taking children into the Country without taking
any Medicine. Its most frequent occurrence is in
hot weather after a rain, and is never found
in Countries where the Temperature is Equal as
in hot or Cold Countries. This disease is often Con-
founded with the Intestinal remittent fever of Summer
which is a disease of our Country and Bengal
It is well described by Dr Wade, Dr Cooke of Virgin
ia has described the Intestinal remittent fever with
great precision and Accuracy. The Cholera Infan
tum is a Chronic Inflammation of the stomach
and upper Intestines and is a disease of Conges-
tion. In it no [illegible] Bile is ever discharged and

there is never a chill or remission. It is sometimes but very rarely inflammatory as is Cholera Morbus and when so the Brain is often affected and the Vessels take on that secretory action which as in Hydrocephalus Internus throw out water into the Brain, The fever approaches to the Character termed Continuous and when there are Exacerbations they are very irregular, The pulse is small and frequent but sometimes the Brain becomes loaded and the pulse becomes slow. at othertimes the Brain and whole Nervous System is prostrated and the pulse is so frequent that we Cannot Count ~~them~~ it. In both these opposite states the patient will be comatose and will only be roused by the pain and the Evacuations, they fall into the same state The pulse becoming irregular is a very bad Sign and often precedes death. The Skin except at first is not much raised in temperature, but the Abdomen is hot and sometimes very much

swollen from the inflammation and Congestion whilst the Extremities are Cold. This is not the case in the Intestinal remittent fever Seldom any perspiration until it is induced by Calomel. The Tongue is generally natural and moist, It is sometimes white, but very seldom brown until towards the last stage. The thirst is very great and no drink is so pleasant as Cold water and the Mothers Milk. The matter thrown up from the stomach is a mixture of Gastric Juice vitiated Bile and drinks sometimes it is green like unto Scheele's Green, often a dirty yellow Colour. The Alvine Evacuations are similar & sometimes tinged with blood. in the latter Stages they are a watery greenish Yellow and very acrid making the throat and anus sore, the last of which will be very greatly relieved by washing in warm water. The Alvine Evacuations exposed to the sun and air

will often become white in half an hour. this is never the case with the diseases produced by Marsh Effluvia. the Stomach is in some degree by spiptic giving you lienteric discharges.

Prophylaxis- Cleanliness Cold bathing before the attack, counteracting and removing the indirect debility induced by heat. Children often have it by throwing off the Bed Clothes to obviate which they should wear night slips and trousers and wear Flannel next the Skin- the Diet should be Cows milk and a little salt meat. Fresh beef is often an exciting cause- Cracker, ship biscuit and Toast is the best bread, Tea, Coffee, unripe fruits and acids should be avoided, the drink should be Cool- rice and milk is a good diet But what is most important of all Children should be kept out of the sun when hot, this is one reason why we send them into the Country and in the woods. The Treatment of this disease

will be first to wash the child clean and
let it drink pure water, such as has no salt
in it. Emetics are improper except the stomach
is overloaded then a few grains Ipecacuanha
may be given. if Emetics are at all proper it
would appear that those possessing Tonic prop
erties would be most beneficial such as the
Sulp. Zinc. or the Sulph. Cup. — Purgatives will
only cure the mildest cases, and in them Milk &
water would do just as well if the child were
put to bed, the drastic purges are always inadmis
sible — Rhubarb is a favorite, and some Combine
with Magnesia, which last may be useful as
regards the acids of the stomach, absorbents are
not to be relied on, tho in the debility that follows
the disease when there is only a Diarrhea they
are useful — The Chalk Julep, Cinnamon Julep
Opium and Laudanum, which is the practice with
some are of this description also a decoction of

Oak Bark and Blackberry root, boiled in milk are sometimes useful. Some have recommended the use of Calomel and Opium - but Dr. Potter thinks Opium always improper in diseases of Congestion - it may afford temporary relief - but the disease will return as bad or worse than ever, Opium suspends the secretions of the Liver Blisters are seldom useful in this disease - Calomel in large doses are improper and frequently makes so powerful an impression as to sink the patient If there be Constipation remove it by an injection - Calomel may be given advantageously in the following doses to a Child of One year old half grain three times a day, Two years old one and half grains and so in proportion to the age of the Child when given in these doses Calomel acts as a Salivant upon the Stomach and Liver and thus unloads the Congestion - Should this practice not succeed in two days we had better continue it. The puking

and Diarrhea will lessen and the Child get well
this remedy may be given in any stage of the disease
Dr. Potter relates the case of a Child of Dr. Roberts' who
had this disease for three months, and was so low
and emaciated that it was carried about on
a pillow- its eyes were glassy, several times the
child was thought to be dead, and they were about
to prepare for its interment. this practice was
resorted to. and the Child recovered.
In thus concluding the performance of the last duty
imposed by the regulations of the University, it
would evince a degree of insensibility the
imputation of which I would very unwillingly
submit to- were I to omit returning my sincere
and grateful acknowledgments to you, gentle
men, for the unwearied assiduity with which
you have laboured for my instruction & for the
kind & gentlemanly treatment, I have uni-
formly experienced at your hands—

An Essay
On Injuries of the Head
submitted to the examination of
the Right Revd. Bishop Kemp, Provost,
the Trustees, and
Faculty of Medicine, in the
University of Maryland,
for the Degree of M. D.
by
Walter R Bayly
of Hagerstown
Maryland.

March 20th 1827.

To

J. B. Davidge A. M. M. D.

Professor of Anatomy, and Lecturer on Surgery,
in the University of Maryland

this Treatise is inscribed with sentiments
of the most profound respect,

by

Walter. N. Bayly.

Careat succesibus, opto,
Quisquis, ab eventu, facta notanda putat.

On Injuries of the Head.

Injuries of the Head may be considered more dangerous than those of
ny other part of the Human System, in consequence of the influence
ey exert upon the Brain and Nervous system.
The Brain may be considered as composed of Cerebrum, Cerebellum
and Medulla Oblongata, and from these are derived principally
the Nerves of Sense; those of Volition being sent off by the
Medulla Spinalis, an appendage of the contents of the Cranium
There is also a second system of Nerves, supposed to influence in-
voluntary actions, as the Heart &c, which is likewise affected, when
ny considerable injury happens to the Brain; this system is formed
incipally by branches from the fifth and sixth pairs of Nerves
mmunicates with most of the Nerves of the Brain, and is dis
ibuted to the Heart and Viscera of the Abdomen.
When the Head suffers an injury, we find the functions of
olition and sensation in a great measure and sometimes entirely
iminished; the Stomach is disordered, and in consequence of the
eneral communication between the Sympathetic Nerves and those
the Brain and Spinal Marrow, the functions of the Heart
nd Abdominal Viscera become deeply affected; the Mind is
paired, the memory lost, and the judgment very much weaken
; thus we see the powers of Sensation, Volition, involuntary
tions, and of the Mind are alike affected by an injury inflicted

on the Head with such violence as to produce any effect upon the
ents of the Cranium.
e direct cause of the above mentioned symptoms arise principally from
t Concupion or 2d Compression occasioned by extravasation of Blood.
pression of Bone, or by matter formed in consequence of inflam
ation of the Brain.
Having premised thus much, I shall now proceed to treat of the
eneral symptoms of affections of the Brain.

Concussion.

. this state a patient at first sight would seldom be consid
d as seriously affected, by a superficial observer; we find him
parently in a pleasant sleep his breathing easy and nearly nat
l, his pulse steady and retaining its wonted velocity; if however
attempt to rouse him, he is with difficulty excited, when spo-
to he mutters and answers incoherently, we now perceive him
natose, we are told he has received a blow upon his head,
llowed by a loss of sensation, and probably he has vomited, there
t first a difficulty of procuring either alvine or urinary discharges
d after a short time they are evacuated involuntarily; this
te of things is sometimes attended by Epistaxis and in consequence
the Blood passing into the Throat and Stomach a vomiting of
lood, the pupils of the eyes are generally dilated; the pulse
though at first natural, if the patient be roused will suddenly
quickened; the action of the Carotids is rather hard and frequent
proportion to that of the other arteries of the Body; the Mind
riously affected according to the degree of injury to the Brain;

ome cases there is a complete loss of mental power, in some we can
t difficulty obtain a rational answer, the memory is sometimes lost,
others only partially impaired.
tients generally remember nothing of the accident; if it be
casioned by a fall from a Mast-head, the last thing they remem
er is, that they were aloft.
he degree of injury sustained by the Brain varies in different cases;
ome are only stunned for a moment, some recover in a few days,
thers not for ten or fifteen days, some entirely recover, others have
ways an imperfect memory; squinting mostly follows an injury
ne to the Brain, in some the irritability of the Stomach is so
uch increased that Vomiting will be produced upon the slightest
itement, a circumstance probably accounted for by the direct
mmunication of the Brain and Stomach by means of the
Par Vagum. All the usual symptoms of concussion have
been known to follow a general shake of the Body-
nder Concussion if we examine the Brain, unless the injury has
very severe, it would appear as though the symptoms were only
effect of the disturbance of the natural course of the blood
ough the Brain; a fit of Vomiting therefore frequently restores
functions of both mind and body, by forcing the blood through
Brain; Examinations of the Brain seldom account for these
mptoms unless the injury has been excessive and there is consequent
ceration. We are therefore warranted in calling concussion an
eration of function rather than a disorganization.
Treatment in this affection must be so directed as to regulate

e inflammation of the Brain and we accomplish this generally by
esorting to Phlebotomy in such quantities as the state of the pulse
will permit, we must be careful however never to bleed until
reaction comes on.
As respects general remedies Emetics are only useful in lenient
cases, in laceration of the Brain they are dangerous, spontaneous
vomiting is however generally beneficial; Purgatives and Antimo
nial Diaphoretics are always useful, Counter irritation, by
Blisters, Issues, or Setons, has been succesful after the failure of
other remedies.

Trephining in Concupion is not now practiced.

In the treatment we must be careful to avoid all excitement
of the Brain; all common external stimuli as light and noise
must be abstracted, and the patient must be kept in a dark
and quiet room.

Compresion of the Brain

The patient in this state of the Brain experiences a loss of sensation
and voluntary motion, an Apoplectic stertor, slow labouring
pulse, with dilatation of one or both pupils.
The causes of compresion as before stated, are 1st Extravasation
of blood, 2d Fracture with depresion, and 3d Formation of
matter within the Cranium.
In compresion from extravasation, the symptoms do not come
on directly after the accident, the person at the time of injury
stunned recovers quickly and in a little while falls into a coma-
ose state, soon after which the apoplectic stertor commences.

he effused blood producing compresion of the Brain is met with
ther between the Dura Mater and Pia Mater, between the
ia Mater and the Brain, or in the substance of the Brain.
r Abernethy has pointed out the largest extravasations to be
t that part of the Cranium where the Artery of the Dura
ater passes through the Parietal Bone.
ere is no variety of symptoms produced by the different situations
the blood upon the Brain, they arise from the prepure of the blood
hon that organ, the quantity of blood effused will depend upon the
ze of the vepel ruptured, and should the blood rest upon the
rigin of a Nerve, there will be partial paralysis of those parts
which that Nerve supplies.
n the treatment of compresion we are to deplete freely to pre-
ent Irritation and Inflammation, the Bowels must be kept
en, the patient must remain quiet; if there be a bruise indi
ting the place of injury, we may trephine after other means
ve failed; if a fracture exist and the symptoms of compresion
ill not yield to depletion we should trephine to seek the
ffused blood; we are never however to puncture the Dura
Mater, as the chance of succes is small, and the danger of
wounding the Brain considerable.

Of Fractures of the Skull.

These fractures generally are not dangerous unless accompanied by Concussion or Extravasation, consequently when called to a case of Fracture, we are to learn from the symptoms, if any, which of these affections be present and regulate our practice accordingly.

Fractures of the Skull are of the most dangerous kind, because generally attended by effusion, or by inflammation of the Brain caused by the violence of the injury, they are generally produced by falling from a great height on the summit of the Head, the whole weight of the body being received on the Foramen Magnum and Cuneiform process of the Os Occipitis, thereby in many cases occasioning a transverse fracture through the Foramen Magnum, Cuneiform process and part of the Temporal Bone; a discharge of Blood into each Meatus Auditorius is also sometimes caused, which often occasions an irremediable deafness.

A fracture within the Orbit sometimes occurs particularly among Pugilists which is generally fatal.

It not unfrequently happens that a blow received on the side of the head will produce a circular fracture of the Cranium commencing at the vertex and passing down through each Temporal Bone to meet at the Basis of the Cranium. A fracture also sometimes happens at the Frontal Sinus which when simple may be discovered on blowing the nose, by the air passing into the cellular membrane producing Emphysema,

the fracture be compound the air passes through the Opening.
rge portions of bone are sometimes removed from the skull without
ccasioning any serious consequences.
ractures of the Cranium, unless accompanied by concussion or pressure,
te as fractures of other bones, the uniting medium being generally
tilaginous instead of bony matter.
The treatment of these fractures we are to pursue the
ntiphlogistic plan by purgatives and blood letting, and when
cessary we may apply the Trephine, in this last however we
st not be hasty, if there even be depression of part of the
ne we must not always decide upon an Operation, because
external table of a bone may be depressed and the internal
at " all injured, there may be also an apparent depression
ich is always relieved by proper depletion, this is occasioned
the blood being effused immediately round the part injured, the
guments not being lacerated; the cellular membrane is condensed
l consequently not prepared to receive the blood, thereby occasioning
pression immediately where the injury was received, but no direct
ry to the bone; if there be a compound fracture with depression we
t raise the depressed portion with an Elevator and should it
comminuted remove the small spiculae of bone; if however
lammation have already come on even this practice will
lom save the patient.
hen the skull has been much injured it sometimes happens
t a portion of Brain may be protruded, and even lost without
sioning any considerable alteration of mental faculty,

The injury be accompanied by either concupion or compresion,
have only the symptoms of these affections, but if it be a simple
cision the symptoms of these affections never occur until after
llammation succeeds; a case is recorded where a portion of
Brain being removed, a portion of bone was driven in and occu-
ied its place, and the patient recovered; the conclusions drawn
om this case are, that had the bone been removed, there
uld have been more danger of extravasation or inflammation
d the patient probably may have been lost; in all cases
this kind however, should there be any symptom of
mpresion, the better plan will be to remove the bone;
ses of immediate injury to the Brain are generally followed
first by Hemiphlegia; the great danger attending this
te of things arises either from Inflammation or the
mation Fungus;
prevent inflammation, we must abstract as much
od as the patient will bear, not however to such a
ree as to prevent inflammation entirely, because the cure
effected by means of the adhesive inflammation;
this proces fails in effecting a cure, granulations are formed
ich sometimes project through the opening in the skull
form a fungus, this may usually be repressed by applying
sils of lint, in such a manner as to keep the fungus
tantly and cautiously on a level with the bone,
etimes however we are obliged to remove a part of the
ngus by Caustic; in all these cases it is of the utmost

bstance to guard against Mental and Corporeal excitement.
now necessary to say something of the inflammation
sequent to injuries of the Brain -
e Ordinary symptoms of inflammation arising from
juries to the Brain are, Coma, excessive pain when roused,
dema of the reach around the external wound, the
und itself having a shining glossy appearance, and a
nious fluid being discharged from it, the edges of the
und are Erysepelatous, the face flushed, the eyes red,
- skin hot, and the action of the Carotid Arteries mor-
dly increased; in a short time rigors generally come on;
miplhlegia often attends on that side of the body opposite
re the injury has been inflicted; the coma generally contin
and the patient when roused will give rational
wers till towards the close of life.
the inflammation terminates in suppuration, the matter
l be situated either between the Dura Mater and Skull,
Mater and Tunica Arachnoides, Pia Mater and sur-
e of the Brain, or in the substance of the Brain. When
ter is situated between the Skull and Dura Mater
ay often be successfully removed by an operation with
Trephine; it is however seldom situated here but is
- generally diffused between the Pia Mater and Brain
which an operation will not succeed, as by puncturing
Dura Mater very little matter can be discharged, as it
tuated between the Pia Mater and Brain.

hen matter is formed in the substance of the Brain it may be lodged various parts, and a singular circumstance is, that the symptoms Those of compression, rather than irritation, there being no itation unless the membranes of the Brain be attacked with flammation.

Inflammation of the Brain is generally more slow in its occurrence an that of any other organ, coming on usually in about a ek, but the patient is not safe even at the expiration of three four weeks from the time of injury, and during this time ould pay the strictest attention to his mode of living, more ticularly if there has been considerable depression, and he should ver indulge in the use of spirituous liquors.

treatment of inflammation of the Brain is the same as at required for inflammation of other parts of the body, ept that the blood should generally be drawn from the mporal arteries in adults and from the Jugular veins in hildren.

To remove the Nervous torpidity which frequently attends hese affections of the Head, the Tinctura Lyttae has been ecommended with great success.

The long continued head-aches which generally follow injuries of the Brain are often relieved by Issues or Setons.

The Operation of Trephining.

is operation may be practised;

When there is effusion of blood between the Dura Mater & Skull.

In fractures of the Skull, with symptoms of compression,
continuing after depletion.

In simple fractures with depression and continued symptoms of compress

In compound fracture with depression unattended by symptoms
compression, we may either trephine or raise the depressed
ne by the Elevator.

When Matter has formed.

instruments used in this operation are; a knife with a
ble edge, an Elevator, and a Trephine having a Crown
d moveable pin.

e Trephine should never be applied on the Median
e extending from the Ossa Nasi to the tuberosity of the
Occipitis, neither should it be applied over the Frontal
inuses, nor on the anterior or posterior inferior angles
of the Ossa Parietale.

depression occur at any of these points, we must apply
e instrument at a little distance from them. Fractured
tions of bone should if possible be always raised by
Elevator, and an angle of bone may generally be removed
th safety by Hey's Saw to admit its application.

Mode of Operating.

ter having enlarged the wound and removed the Pericranium
m the part of the bone on which we wish to apply the trephine,
place the pin of the instrument on a point of the sound
ne as near to its fractured edge as safety will permit, as soon
the teeth of the trephine have made sufficient way to prevent
rom slipping, the pin is to be raised, and the sawing contin-
, frequently putting a probe into the groove made by the saw,
scertain how far we have progressed; in middle aged persons
leedings takes place when the saw enters the diploe, but old
young persons having no diploe a few turns of the trephine
is it through both tables of the Cranium without producing
moisture. When we have sawn through at one point we
oduce an Elevator, seperate the remaining portion, and raise
bone which will in a great measure prevent the danger
wounding the Dura Mater; where however an accident of
kind does happen, death is not an inevitable consequence,
There is always more danger of this event, when the Dura
er alone has been injured than where the Pia Mater
Dura Mater have both been wounded, because in the
e case a part of the Brain immediately protrudes and the
ing is closed by the adhesive inflammation; after the operation
calp is to be returned over the opening and a poultice should be
ied, as from the experience of late surgeons this application seems
most congenial to the feelings and more conducive to the
of the patient than any other, constitutional irritation is

to be carefully guarded against; if it be necessary to take away more than one portion of bone the same plan is to be pursued in each operation.

Wounds of The Scalp.

These injuries although generally slight are not devoid of danger; those that are incised, are less liable to cause injurious effects than those that are contused or lacerated.

The principal cause of danger to the Brain from wounds of the scalp arises from the free communication by blood vesels between the scalp and Dura Mater, those vesels anastomosing with each other through the diploe of the Skull, and therefore when the action of one set of these vesels becomes impaired, the influence is readily communicated to the other; it is for this reason an injudicious practice to make incisions through the scalp to ascertain the exact extent of injury the bone may have received, unless when there is depression accompanied by symptoms of injury to the Brain, and even in these cases we should first try the effects of free depletion; when however there is a wound of the scalp and by feeling with our finger we are assured that there is a depressed bone we are warranted in using an Elevator to raise it, or we may even saw off a portion of Bone to admit its use.

These wounds generally destroy life by producing 1st an erysipelatous inflammation of the Head, this may be

prevented by attending to the state of the Primae Viae.
2d By producing extensive suppuration under the Tendon of the Occipito Frontalis Muscle; these abscesses should be opened early to prevent the extension of the matter over a large surface of the skull.
3d By rendering a simple fracture compound, thereby producing a more extensive inflammation, this should never be resorted to unless demanded by the most imperious necessity.
An extensive Ecchymosis is sometimes occasioned by the rupture of one or more of the vessels of the Head, without there having been a wound opening externally; This is occasionally mistaken for an abscess or a swelling of the integuments for which Poultices and other applications have been used to produce suppuration.
On referring to the history of the case, we may draw a correct conclusion as to its character, and should not hesitate to evacuate the blood, and if the Artery be large search for and confine it by a Ligature.

Walter R Bayly

An Inaugural Disertation

on

Indigestion

submitted to

The Revd. Doctor James Kemp Provost

and the

Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medecine

by

James L Billingslea of Maryland

March 1827.

It must be confessed, that notwithstanding Indigestion is of more frequent occurrence than any other disease, and has long been made the subject of medical investigation, it is still involved in much obscurity both as regards its pathology and treat=ment.

It is a disease, which is most frequently found following in the footsteps of wealth, luxury and indolence; but no county or class of Society is exempt from it. When we consider the Stomach, placed as it is in the centre of Sympathy, surrounded by the most important organs in the animal economy, and the receptacle of all those various substances, which nourish and support the system; when we further reflect on its delicate structure, how it is repeatedly loaded and then spurred and lashed by various stimuli — we are not surprised that it should at length fail to discharge its important function.

It is true that it is not often a disease of rapid strides, but yet it is one that not only annoys our comfort, but lays an embargo on those gratifi=cations, which too few are willing to renounce.

The greatest obstacle to the successful treatment of this affection is, the difficulty of making the patient sensible of the necessity of pursuing that course of life, which alone affords a rational hope of succes.

It is also of the first importance to ascertain the cause of the disease— If the Physician can accomplish these objects, he may congratulate himself in having half his work done; but if in defiance of all his efforts, his patient persists in his old course of life, he has little to promise either himself or his patient.—

Indigestion seldom attacks the laboring class of Society, or those under Puberty, except from some vice— Males are more frequently the Subjects of it, than females, on account of the former being more intemperate than the latter.—

In treating of Indigestion, we are not to limit our views to the Stomach, but to the canal and collatitious viscera, considering them mutually influencing each other.

It may be considered under three varieties—

1st Debility of the muscular fibres of the Stomach.

2d When it arises from Sympathy with the collatitious viscera, or is communicated from the Stomach to them.

3d From Chronic inflammation.—

After innumerating the Symptoms generally, with those peculiar to the above varieties; we shall give the causes and adopt the treatment accordingly.

Indigestion is defined by Dr Cullen A want of appetite, a Squeamishness, sometimes a vomiting, sudden and transient distentions of the Stomach, eructations of various kinds, heartburn, pains in the region of the Stomach and a bound belly. As the above can be considered nothing more than a general outline of the Symptoms, it may be proper to enter into a more minute description of them, as they are developed in the progress of the disease.

Some usual and accustomed article of diet dis aggreeing with the stomach, is usually among the first symptoms of this disease.- Cardialgia, acid eructations, transient distentions, some hours after eating with flatulence, are symptoms, which seem to arise from the food being imperfectly digested; instead of being con-verted into good chyme, it is changed into a mass of half diges-ted acid matter, which produces the above symptoms.- Those transient distentions which so repeatedly annoy the dyspeptic, may (probably) arise from the extrication and retention of some gas.- Those symptoms may pass away for a time, or contin-ue to recur without sensibly affecting the system or calling much on the attention of the patient, but their continuance seldom fails eventually to disturb the healthy secretion of the stomach, which is manifested by the tongue being furred particularly in the morning. At length he begins to reject his food a short time after eating, becomes pale and chilly, feels sluggish and inactive after meals, rests badly at night, feels little refreshed in the morning, with no appetite for breakfast

He now begins to take a more serious view of his case, becomes low spirited, especially in damp, cloudy weather, and is continually harrassed with the fear of death. He is troubled with headaches, palpitations and various other troublesome nervous affections. — A pain in the back from vitiated matter in the duodenum is a frequent symptom. The Skin is often dry and husky, and hence the reason of the more copious flow of pale limpid urine, which on standing deposites a lateritious sediment, owing to the acid in the alimentary canal; from this abundance of acid in the alimentary canal they explain the frequent connection of gravel with this disease. The tongue is various, sometimes it is of a smooth shining red, but mostly moist and furred. —

Causes.

Over-distention of the Stomach especially with indigestible articles of diet — full meals of animal food — large indulgence in Stimulant and acrid materials, such as ardent spirits, Spices, acids, tobacco whether smoked, chewed, or

snuffed - rigid abstemiousness or long fasting - indolent and sed-
entary life - intense Study - violent passions of the mind, especially
of the depressing kind as fear, grief and anxiety. - Frequent vom-
iting whether Spontaneous or excited by art - exposure to moist
cold air without exercise - excessive venery - onanism - large
evacuations of any kind - long continued use of the neutral salts
Keeping strong children a long while at the breast.
There are two causes which give rise to this disease in its
worst form, and may occur at any time, age or under any
circumstances, they are Electricity and imperfectly cured
inflammation of the stomach, whenever dyspepsia is suddenly
whether in young or old persons we are to bear the above
causes in mind.

Having enumerated the above causes, we will now proceed
to treat of those symptoms which characterise our second
variety. - The symptoms which denote this state of things - are as
follows. - Variety in the above evacuations, it must be recollected,
however, in judging from these, that when the feces are delayed
in the canal, their colour is darkened, they are also influenced

by certain articles of diet, milk for example produces a lighter discharge and some medicines have such an effect upon the excretions, as to make it necessary for the practioner always to bear these circumstances in mind, in forming his judgment from them.— There is mostly a tenderness with a sense of weight and fullness to be observed in the right hypo=chondrium.— A burning sensation in the hands and feet— Tendency to partial sweats toward morning— Paucity and deterioration of the biliary secretion— Scalding in making water— Pain in the Shoulder and sometimes in the back. It is not uncommon for the dyspeptic laboring under this variety to be much harassed with a troublesome pain in the Serobiculus cordis, this pain has been very ingenious=ly accounted for by Dr James Johnson, by referring it to a disease of the centre of the liver.— The patient in this variety is frequently affected with alternate diarrhœa and constipation, griping pains the Stomach and bowels— foul and clammy tongue, with aphoe.

Before taking leave of this part of our subject we are desirous

of directing the practitioner to a symptom to which it is of importance to attend, we mean a hard pulse, this state is most evident immediately after exercising, which is the time that should always be selected.— The manner of feeling the pulse to detect this tension shall be described in our third variety, which we shall now to proceed to consider

Our first enquiry should be to ascertain, whether the patient has laboured under acute inflammation of the stomach, as we have already spoken of an imperfectly cured inflammation of this viscus giving rise to the worst form of indigestion.— There is much more tenderness and irritability of the stomach in this variety than either of the others. There is a symptom of this variety, which is not mentioned by authors, it is a pain in the epigastrium on swallowing anything that is not perfectly masticated, this pain is only felt during the act of swallowing, and seems only to subside immediately on the food entering the stomach, only to recur on the repetition of a like effort.— I am altogether at a loss to account for this pain, unless it be from inflammation of the cardiac orifice of the stomach.—

Having given the above symptoms we are prepared to proceed with a part of our treatment, which, altho, not strictly medical, is of the utmost importance in our plan of cure.—

Diet.

Our first object in the treatment should be to ascertain the cause of the disease, and having possessed ourselves of the cause, we must make him, if possible, sensible of the necessity of relinquishing it, and putting himself under a new rule of conduct.—

His diet should be that of the most digestible kind, and in such proportion as not to oppress & overdistend the stomach, he should eat slowly and masticate his food well, which will enable the gastric secretion more readily to act upon it, and will irritate the stomach much less. He should make it a rule never to satisfy his appetite, but leave the table hungry.— As few are able thus to restrain themselves at all times, it would be best for them never to set down to a regular meals with the family, but have an allowance of such food as is proper by himself.—

It is almost impossible to point out articles of diet suitable to every stomach, as what will agree with one, will offend another, and vice versa.—

As a general rule we may say, that all kinds of soups are improper, they are not only more liable to become acid, but distend the stomach and dilute the gastric secretion. All accescent, oily articles of food are difficultly managed by the stomach, and should not be used by the dyspeptic.— As it regards meals, it may be remarked

That those procured from the middle-aged are more digestible than those obtained either from the young or old, in consequence of the greater abundance of mucilage in the former, and gelatine in the latter.

The lean part of fat beef, (when mutton cannot be obtained, which is much more digestible) is very good, and in moderate quantity is agreeable to most stomachs.

The lean part of venison particularly after the chase is considered the most digestible food of this kind.

Canvas-backs ducks in the early part of winter are very digestible, but towards spring they become too indigestible for the dyspeptic.—

Wild animals are generally more digestible than tame, from the large range of exercise, and appropriate food of the former, and should always be preferred.—

Fish is intermediate between animal and vegetable foods, and independently of the rich gravies with which they are eaten, are less digestible than the flesh of land animals.—

Eggs, which are also intermediate, if slightly boiled and eaten with stale bread will be found a digestible, nutritious article of diet.—

As bread constitutes a large share of our diet, it is of much importance to select such as is proper; we may here also lay down a general rule—That all such as forms a thick, tenacious paste when chewed is improper.—hence the benefit so often received from hard ship bread or cracker, also from hard ginger bread well seasoned with ginger; but of all kinds of bread with which we are acquainted, there is

none to be compared with that made of unbolted flour, commonly termed Dyspepsia bread; its benefit seems more to depend on the irritation which the bran imparts to the animal gay canal, than the coarse mass it forms in being chewed.— We are not ignorant of the fact, that, this bread if eaten by any other than a dyspeptic, will often induce diarrhoea, which may be explained on the above principle.—

There are peculiarities in stomachs with respect to fruits more than other articles of diet, generally speaking they are improper, especially the cold and accescent fruits, as cucumbers, melons &c.— All preserved and pickled fruits are improper, from their tendency to become acid.—

With respect to Drinks of all kinds, it may be remarked that none of them should be taken in large quantity. The pernicious practice of taking large draughts of water, while eating is highly reprehensible, more particularly if it be of a stimulant quality, from the momentary spur, it imparts to the stomach, it is induced to receive more food, than it requires or can manage, and is frequently a fruitful source of this disease.— The best drink (unquestionably) is pure water, which as we have already remarked should not be taken freely, nor be cold or warm. Coffee, from its tendency to become acid, can seldom be borne by the dyspeptic; but Tea mostly sits comfortably, sometimes, however, neither can be received with impunity, when the patient must resort to diluted milk.

We have already placed our Veto upon alcohol, but it must be remarked, that to those who have been accustomed to its liberal use, a small portion seems indispensible, when necessary the best form seems to be that of good old madeira, but the patient himself will soon discover the form most agreeable to him.

Of the numerous vegetables that adorn our tables, I have, as yet, said nothing, nor can I promise the dyspeptic much indulgence here, he may look upon them with a wishful eye, but he must touch none, taste none, except the potato, which should be of the mealy kind.—

Although we have mentioned comparatively but few of the articles of the <u>alimentaria</u>, which are to be rejected by the dyspeptic; yet we trust we have said enough to convince him, that if he would subdue his enemy, he must deny himself, and live temperately, regularly and soberly, avoiding equally the alehouse and confectionary, and contentedly breakfast on a small piece of lean ham, with stale bread, and dine upon such meats, as we have described most digestible, and here we may remark, that any kind of vegetable whatever, should constitute but a small portion of it, if to be troubled with much acids.—

Some difference of opinion has occurred, as to the repetition of our meals in the twenty four hours; according to the experiments of Dr. W. Philip, it would appear that three moderate meals in the

twenty four hours is the best rule, but it must be remembered that most dyspeptics are extremely uncomfortable when their stomachs become empty, which has given rise to the advice of "Taking little and often" Perhaps the middle course of the two is the better, not always cramming the stomach, nor yet on the other extreme suffering it to become perfectly empty.

Exercise.

This part of our plan of treatment is one of no little importance, and often calls much on the ingenuity of the practitioner to adapt himself to the exigencies of the case; in vain will it be to exercise, if the mind is suffered to linger with melancholy despair on his unhappy situation — it is to cheer, delight and animate the drooping spirits we must aim, at and by engaging the one while we exercise the other, the point particularly to be desired in this disease is obtained. It must not be forgotten, however, that the exercise is never to be carried to the extent of fatiguing, which would prevent a healthy reaction, thereby loosing more than we gained. He should retire early and rise early, and before leaving the room should excite a gentle glow on the surface by means of the flesh brush.

It is a point of much consequence, on what kind of bed he reposes — If it be cold weather and the patient much prostrated by the disease, a feather bed should ~~should~~ be preferred. but if on the

other hand, his strength be such, as to admit of a hard one, the relaxing effects, of indulging in a feather bed, particularly in warm weather, will considerably retard his convalescence.—

There is a species of exercise, to which I am particularly desirous of calling the readers attention, from its admirably combining the points, we mentioned, as so desirable. It is the game called Fives. To those, who are acquainted with this exercise, its superior advantages are manifest, but it is too severe for the exhausted valetudinarian.— There is another exercise but little inferior to it.— It is Fencing, which may justly be considered of great importance in this affection.— The gentlest kinds of exercise is Sailing or Swinging, next to which is the motion of a carriage.— The dyspeptic should never think of riding immediately after a full meal, as it is a frequent cause of indigestion, especially in medical gentlemen; if the patient can bear it walking is better than riding on horseback, particularly observing not to fatigue himself, avoiding equally the heat of the day and the dampness of the night.— It may be proper to remark that an hour or two after meals is the best time for exercise, which should never be taken on an empty stomach.—

Medical treatment adapted to the debility of the muscular fibres of the Stomach.

While using proper diet and exercise, it is necessary by the aid of medicine to endeavour to remove the consequences of the causes already mentioned.

When called to a patient labouring under this affection, it is not unusual to find the stomach greatly oppressed and distressed from ill digested food, which probably suggested to the illustrious Cullen the utility of an emetic in this state of things, as an emetic can only be useful in evacuating the morbid contents of the stomach, it may not always be required, and its frequent repetition is unquestionably hurtful, not only from its being often a cause of the disease, but its tendency still more to weaken and invert the natural action of this organ.

When an emetic is indicated, such an one should be selected as will accomplish our object with least distress to the constitution, hence the advantage of the Sulphate of Zinc for this purpose, which should be followed by a mild aperient of the following composition — ℞ Aloes. Rhubarb & Soap aa.— That the canal may be unburthened of its offensive loads.

There is no symptom that more urgently demands the attention of the practitioner than the frequent ejection of the food soon after eating; this seems to depend ~~on the~~

on the unhealthy secretion of the stomach preventing the proper digestion of the aliment, which irritates the stomach to free itself of its morbid contents.— To obviate this distressing state I have found the hickory Lye taken immediately after meals of signal advantage. The following is the method of preparing it:

℞ Of Hickory Ashes (Sifted ⊙)
Soot — do — Tea-cup full.
Boiling Water — Two gallons

Let it stand six hours and then strain. Dose Wineglass thrice a day.— If the bowels be constipated, when it is our object to correct the acidity, Magnesia should be selected, which forms a salt by combining with the acid and acts on the bowels.— Other absorbents are frequently used, as Lime Water, chalk or charcoal.— The chalk in the form of the Mistura Cretæ is of great service particularly if diarrhœa be present, which is by no means unfrequently the case; it not only restrains the diarrhœa, but sheathes and defends the stomach.

When it happens that there is much coldness of the surface with debility Carb: Ammonia will be found of great service.— When none of the above indications, however, are present, the best Ant-Acid is the Carb: Sodæ.

The irritating matter in the canal sometimes gives rise to very distressing pains, which may generally be relieved by the application of warmth to the stomach and feet: but when the pains are urgent an opiate may be advantageously given.—

There are few dyspeptics, whose feet do not suffer excessively in cold weather, which frequently gives rise to pains in the stomach and bowels, and interfers considerably with the process of digestion.— It will be found to add much to their comfort if the stockings be sprinkled with the Capsicum Annuum.—

To restore the tone of the stomach a great variety of Tonics, bitters and aromatics have been recommended; notwithstanding their general use, we are inclined to believe them unworthy of the importance attributed to them, and from their unjudicious application often very hurtful; nevertheless we would not altogether proscribe them, yet tho we believe the above indications, may in most instances be better fulfilled by proper exercise and diet; they raising the whole System without oppressing the weakened Point.—

If Tonics are used they should be those of the mildest Kinds, as Columbo, Sarsaparilla, Gentian &c.— The Peruv: Bark, the prince of tonics, from its oppressing the Stomach, is improper in this affection.—

As it relates to the preparations of Iron and Zinc, I have had little experience, but as they are highly Extolled by some authors, it may be proper to glance at them as worthy of trial.— The white oxyde of Bismuth has been so highly recommended in relieving the distressing Pains of the Stomach, that I have determined whenever opportunity shall offer to give it trial. I am unable to account for the efficacy of its operation.—

The only benefit we can ascribe to the aromatics as Orange-peel, ginger, Nutmeg &c is the temporary excitement they impart to the stomach, thereby overcoming the distention.

and relieving the flatulency; but it is only in moderate quantity that they can be advantageous, if too freely used they fall under the same objections we have already made to alcohol.—

We shall content ourselves with having thus cursorily passed over this part ~~of part~~ of our subject, which may justly be thought brief, in consideration of the numerous medicines recommended to fulfill this indication, which in part induced us thus to circumscribe it.— As it is not only disagreeable, but hurtful to be taking medicine to overcome the constipation so often, as it is required, we would insist on the patient's cultivating a habit of evacuating the bowels at a regular, stated period every day, which may in the course of a few weeks, by the force of habit, obviate the necessity of medicine.— For this purpose the patient should select the early part of the morning, as it is less liable to be intruded upon by the demands of business.—

Medical treatment where the colla-titious viscera are affected.—

We have given those symptoms, which we trust will enable the practitioner to judge whether the surrounding viscera be or be not involved.

When they are the patient is frequently troubled with vomiting of bilious matter, particularly in the morning.— To relieve which the following formula will be found very excellent.—

℞ Pulv: Rhei Gr x
Carb: Sodæ Gr x
Sub: Muriat Hydr: Gr ij
} Taken daily at bedtime.—

The great object to be accomplished in this variety, is a change in the state of the liver; to effect this important object, we have but one resort that is Mercury. The preperation best suited to this state of things is the blue mass, from its being less irritating and remaining longer in the alimentery canal than calomel. One grain of the mass should be taken night and morning, if that should be considered too often, it may be taken only at night, which should be continued until the mouth becomes slightly affected, which should be kept up as long as required, strictly observing the regimen above pointed out. As the internal use of the mercury for any length of time is found to offend the Stomach, perhaps the best way of introducing it into the system, and the way which should be preferred in this case, is thro the Skin, which is better able to manage it, than the diseased Stomach. At the same time or after the suspension of the mercury, it might be found useful to use the Nitric acid or the Sarsaparilla, using also the Nitro-muriatic acid bath.

Medical treatment adapted to the chronic inflammatory State. To this variety Tonics, bitter and aromatics are altogether inapplicable; they increase the inflammation and consequently the fever and uneasiness, and so far from strengthening, tend still further to debilitate. The antiphlogistic measures which are necessary are not to be carried to such an extent, as in the other Phlegmasia, not only because our patient cannot bear it, but to husband his strength as much as the nature of things will admit.

It may be proper to commence with small and repeated general bleedings; topical bleeding by Leeches or cupping.

After the topical bleeding great benefit may be derived from the application of a blister to the same part.

As it respects purging in this condition, it may be remembered that the bowels will bear to be much more freely acted upon than in either of the other varieties.

For the relief of that disturbing sensation of burning in the hands and feet eight or ten grains of nitre will be found effectual.

If after the above measures with diet &c have been tried, the symptoms should still continue, a Seton or Issue should be used, and has often been followed by the happiest effects.

When all have failed, our last resort should be to a Sea Voyage or change of Climate. The confinement and luxury of the usual life must be exchanged for the peaceful tranquility of rural retirement.

In thus bringing our subject to a close, we are sensible of having omitted purposely much, which would have too far enlarged the bounds prescribed to ourselves — and notwithstanding all that has been written on the subject, the Physician is often disappointed in his expectations — The hopes of his patient blasted, and his few remaining days embittered by the direful consequences of his incurable malady.

An Inaugural Dissertation on Cephalitis

Submitted to the Examination of the Right Rev'd James Kemp D.D. Provost. The Trustees and Medical Professors of The University of Maryland For the Degree of Doctor of Medicine on the seventeenth day of March 1827.

By William H. Rider of Somerset County, Maryland

To

Nathaniel Potter M. D.

Professor of the Theory and Practice of Medicine,

In the University of Maryland:

The following Pages

Are

With Sentiments of the highest deference

for his Talents,

Respectfully Dedicated

as

A small tribute of gratitude and Esteem

by his Sincere Friend

W. H. Rider.

Preface.

In the investigation of a subject like the one under Contemplation; on which so much has been written and ingenuity exercised, little else can be expected from the Pen of inexperience, than to retrace the steps which have been trodden by those - whose observations and profound researches in Medicine leave nothing, upon which the mere Medical Tyro can lay Claim to invention or Originality of Conception. The short period, that is allowed to those, who may be Applicants for the Honours of the Institution, in which to prepare An Inaugural Essay as a necessary preliminary to such distinction; induces me to Ask indulgence for the imperfect performance of a task, imposed by Necessity, and attempted with much reluctance and Apprehension.

Of its defects I feel Acutely Sensible; but from the Apprehension which I should otherwise experience on this account, I am Considerably relieved by the remembrance of the Lenity and Candour of those Illustrious Professors to whose immediate inspection it is to be Submitted. I have Chosen

For the Subject of this Dissertation "Cephalitis", and shall in as succinct a manner as possible attempt an elucidation of its Character, causes, Symptoms and Method of Treatment.

Cephalitis.

This Disease has generally been described under the Name "Phrenitis" from the Greek word φρενες diaphragm. It were unnecessary for me to attempt to show, why a preference should be given to the Name, with which this Essay is commenced, as I am ably supported in adopting the former by the learning of Good and others.

Dr. Cullen places Phrenitis among the Phlegmasiæ, defining it "a Violent Febrile Affection, attended with pain of the Head, redness of the face and Eyes, intolerance of light and Sound; pervigilium, fierce delirium and typhomania".

Cephalitis frequently attacks with a Sense of fullness in the Head, occasional flushing of the face, redness of the Eyes - the pulse being various - sometimes full but otherwise

natural. Sometimes some degree of Stupor and rigidity of the Body mark its Accession. Not unfrequently these are Observed among its Earliest Symptoms - Nausea and a painful Sense of weight in the Stomach; Vomiting or Heart-burn and griping pains in the bowels - Anxiety and a Sense of Oppression referred to the Throat.

It is Observed sometimes to be preceded by temporary loss of recollection, disturbed Sleep or frightful dreams, pains in the back of the Neck shooting in various directions, suppressed Urine And irregular pulse.

The Pain in the Head is sometimes Circumscribed and deep seated, but more frequently it seems to Occupy the whole Head - The pain is sometimes excruciating, accompanied with extreme Sensibility to impressions of light and Sound - peculiarly wild expression of the Countenance and Constant watchfulness, succeeded by ferocious delirium. - The face becomes turgid - the Eyes stare and seem as if they were project from their

Sockets, Horror, and sometimes hemorrhage from the Eyes, Nose and Ears. Dysphagia sometimes occurs - the Stomach is frequently oppressed with bile, the Skin and Urine become tinged with Yellow, and the Patient exhibits all the Appearances of Complete Jaundice.

Some Complain of excruciating pains in the the limbs, particularly those of the inferior extremities, and Cry out in the most extreme Agony.

In the first Stage of Cephalitis the Pulse is generally Quick and hard, the tongue white or slightly tinged with Yellow - the Fever Ardent and Skin excessively Hot and dry.

In the Congestive State of the Disease the Pulse is full and sometimes slow - the tongue brown - the Skin Cool and Moist and the Stomach very irritable: -

It is stated by Writers that when the Membranes of the Brain are the principal Seat of the Disease, the Pain is much more Acute, than when the Substance of the Brain alone is diseased. However it is of no practical importance to know which be the Seat of the Affection, as our treatment

in either should be decidedly Antiphlogistic.

Diagnosis.

Having now exhibited the phenomena of this Disease, it appears next requisite that I should notice those Symptoms, by which it may be distinguished from other Diseases.

The Diseases to which I here allude, are Mania, Delirium of Synocha and Delirium of Typhus.

From Mania it may be readily distinguished by the intensity of the Symptoms, the Violent Fever and throbbing of the temporal Arteries, together with other Unequivocal differences noticed in the Enumeration of the Symptoms.

From the Delirium of Synocha. In Cephalitis, the delirium is the primary Affection; In Synocha it is Consequent upon the General Fever; The Pulse in Synocha is Generally strong and full; In Cephalitis small, Low and more Rapid.

From the Delirium of Typhus. The Affection of the Head in Cephalitis attacks suddenly and the pain is insupportably excruciating: In Typhus the Delirium is preceded

by the Characteristic Marks of that Disease and is not so Violent in degree.

Dissection of the Dead Body.

The phenomena of Disease which so frequently elude the researches of the brightest intellect, can often be only successfully investigated in the Dissection of the body post Mortem. Unfortunately, An opportunity has never presented itself to enable me to Make Any Examination of those who may have fallen Victims to the ravages of this Disease. I must therefore be content with a relation of the facts, noticed by Anatomists in their dissections.

Inflamation of the Brain may terminate in Suppuration or Gangrene – but its fatality has been Observed without running to either of these terminations.

The Dura Mater is sometimes found inflamed, and Dr Baillie observes "that there is sometimes, though very seldom a layer of Coagulable lymph formed on its inner Surface". This is more usually found Covering a portion of the Membrane;

or it is eroded by Ulceration, though but very rarely.

"Adhesions Are Sometimes discovered between the Dura Mater and Skull - the Membranes have been found Considerably thickened and in Some instances Converted into a Substance almost as Hard as bone".

Causes.

The Causes originating this Disease are so numerous, that an attempt to name them all, would at least be unnecessary, if indeed it be in the Sphere of possibility. I shall therefore Confine myself with enumerating those that most frequently occur, and such as are most generally found preceding or accompanying this Disease. It is Called Idiopathic when it exists independent of any other Disease; and Symptomatic when it arises in Consequence of Some other Affection.

The Disease in its Idiopathic State most frequently Occurs in Warm Latitudes. Persons who are Young and of a Sanguine temperament - plethoric habit and who indulge in the intemperate use of Ardent Spirits are most liable to it.-

All those Agents which directly stimulate the Membranes of the Brain or its Substance, or increase the Velocity of the Blood in its Vessels; may be regarded as the Remote Causes — Among these are Violent Passions of the Mind, intense Study, excessive Venery, immoderate use of fermented liquors, a long Continued exposure to the Heat of the Sun, severe exercise, external violence — Blows; Concussions and Wounds of the Head.

Some Narcotic Substances have a tendency to increase the impetus of the blood, and may therefore be regarded as Auxiliaries in producing this Disease.

The Suppression of Any Accustomed Evacuation such as the Hemorrhoids, the Catemenia, and the too sudden repulsion of Eruptions may probably have a tendency to determine to the Vessels of the Head, and therefore produce this Disease.

"It Arises in its Sympathetic form, as a Consequence of Synocha — of Eruptive Diseases as stated above & hydrophobia.

Prognosis.

A Prognostic in this Disease may be made generally with some Certainty. Whether it be Idiopathic or Symptomatic it may always be regarded as a dangerous and Alarming Complaint.

The Disease often terminates by the 7th or 8th day - frequently Earlier - and if long protracted is apt to End in Mania, or Considerable prostration of physical power; it sometimes terminates in Stupor and insensibility.

An Effusion of Water between the membranes of the Brain, or in the Cavities of the Ventricles is a frequent Consequence.

The following phenomena Mentioned by Writers indicate generally a favourable termination - "An abatement of the General Fever, of the delirium, of the Sparkling Surry of the Eye and of the dryness of the Skin."

"A Diarrhea, discharge from the Nose, from the Hemorrhoidal Vessels, from the Lungs and Urinary Organs is often Critical, particularly if the pulse abates in frequency, becomes softer and loses its febrile Character"

"On the Contrary grinding of the teeth, White or Ash Coloured Faces, Suppression of Urine, Startings of the tendons, with Convulsions, Cold Sweats, a fluttering pulse and Coma Supervening on Delirium, denote a fatal termenation."

Method of Cure.

For the Cure of this Disease, whether from Causes external or internal, the proper Means should be immediately and promptly employed "Principiis obsta: sero medicina paratur,

Cum Mala per longas Convaluere moras"

If the Cause proceed from without, such as Blows inflicted on the Cranium, thereby fracturing and depressing a portion of the Same, the Surgical Means for relieving such depression should be immediately performed, and succeeded by other such Remedies as the Condition of the Patient may Seem to require.

If however, the Disease proceed from other Causes, which have been enumerated in the preceding pages ~~History of the Disease~~;

such means should be adopted as I am now to point out.

The treatment should be conducted on the Common Anti-phlogic plan; but the measures as I have elsewhere observed should be prompt and vigorous. No time should be lost in tampering about a Disease which attacks at once the "throne of life" and unless speedily arrested will translate the Patient to that "bourne from whence no traveller returns"

It is a Melancholy fact that the greater number of Physicians sheath the Lancet too Early in Diseases of high Vascular Excitement, were they more Sanguinary (if I may use the expression), Success would more frequently attend their Efforts.

Immediately on the Occurrence of the Disease, recourse should be had to bleeding, either from the Arm or Jugular Vein - probably it will be most effectual if the blood be taken from the latter Vessel, the quantity drawn should be proportioned to the Age and Constitution of the Patient and Severity of the Symptoms - The Orifice made

with the Lancet should be large and the bleeding repeated according to the Urgency of the Case.

The Opening of the temporal Artery, when practicable, has been recommended by some Practitioners; this practice I am inclined to believe is Objectionable, upon two Grounds, first the inconvenience experienced in penetrating that Vessel, and Secondly the less probability of affording relief to the Vessels of the Encephalon if such practice is resorted to.

If general bleeding has been practised to as great an extent as the Strength of the Patient will permit without removing the Symptoms, the Application of several leeches to each Temple is advisable.

As an Auxiliary to Blood-letting, Purging is highly Valuable - it acts not only by evacuating the Contents of the Intestinal Canal, but the Brain is relieved in proportion to the Quantity of Fluid discharged. The Cathartics employed should be Mild and

antiphlogistic. The Neutral Salts - Sulphate of Soda, Sulphate of Magnesia and Super-tartrate of Potash are all valuable. - Laxative Clysters may likewise be employed with advantage. The Head should be shaved and kept Cold by Ice Water applied to its Surface by linen Cloths or by pounded Ice in a bladder. Cold Affusion has likewise been recommended by some Practitioners.

After the Inflammatory Action shall have been subdued, and Symptoms of local irritation remain, Blisters will be found highly Useful.

During the time the Patient may be confined, particular attention should be observed in keeping him Cool and as quiet and Unmolested as possible. The Room should have Ventilation, and every thing Calculated to Call on the External or Internal Senses excluded or forbidden. The Diet should be Spare, Composed of Articles that are easily digested -

Cold Acidulated Drinks should be given the Patient with freedom. -

Having now Concluded this hastily and imperfectly written Essay, I with much diffidence submit it to the inspection of those respectable Gentlemen, who Compose the Faculty of Medicine of Maryland. and Avail myself of the Opportunity to declare my Gratitude for the Instruction I have derived from their invaluable Lectures.

Accept Gentlemen my most Sincere wishes for Your prosperity and Individual happiness, and may Your Efforts to Further the Advancement of Medical Science be as greatly Appreciated as they have been beneficial

An

Inaugural Essay

on the

Epidemic Bilious fever of Elkton

Submitted

to the examination of

the

Rev. Bishop Kemp D.D. Provost,

the

Trustees, and Medical Professors

of the

University of Maryland,

on the 2nd day of May 1827.

For the degree of Doctor of Medicine

By John Gilpin

Elkton Maryland

Honorary member of the Baltimore Medical Society

To

Amos A Evans M. D.

Worthy Sir.

It is with great pleasure I embrace this opportunity (the only one I at present possess) of returning my sincere thanks to you, for your unremitted attention to me, and for the medical information I have derived from your private communications, as well as for the politeness, with which you have always honoured me, during my pupilage under your care. As a tribute of my high respect for your superior talents and attainments I inscribe to you the following pages, with deference and respect,

your friend and pupil.

The Author.

Richard Wilmot Hall M. D.

Professor of

Obstetricks and Medical Jurisprudence

In the University of Maryland

Respected Sir,

To you I also dedicate this essay, as a testimony of the high respect I entertain for your professional talents, and as a mark of gratitude for the disinterested friendship you manifested towards me whilst a member of your class.

That you may long enjoy the high rank you so deservedly hold in the profession, is the sincere wish of your much

obliged friend,

The Author

Remarks on the epidemic Bilious Fever which prevailed in Elkton (Md.) and its vicinity in the Summer and Autumn of 1826.

As medical Topography is so intimately connected with a full and fair explanation of the true character of the epidemic and endemic deseases of a County. I shall briefly advert to the situation of Elkton, and the adjacent county, as regards the peculiarities which favour the exhalation of febrific poison. Before I commence a discription of the epidemic itself.

Elkton contains about 1000 inhabitants, it lies in latitude 39° 35' north, and longitude 1° 20' east from Washington City; it is situated on a point of land formed by the junction of the big, and little Elk Creeks, at the head of the tide water of the Chesapeak Bay. The principal part of the Town is located a long the margin of the

the Big Elk, on both sides of which there is a considerable quantity of marsh. An attempt has been made, and partially effected, to reclaim these marshes by inclosing them with banks, and by cutting ditches through them in various directions, on that side of the river most contiguous to the Town. The Bank was broken during the Summer, and not being repaired, a number of acres of low marshy ground was covered by the water every tide. About a mile north of the Town the Granite ridge commences, and with the exception of a narrow slip of land along the borders of the Elks, which is alluvial, is hilly and broken. The soil is clayey and tough, and not very fertile, with the exception of the lowlands above mentioned, which are very productive.

South of Elkton the soil is light, sandy, and alluvial, with the exception of Elk neck a very

very hilly, and barren district of country, about 20 miles long and at its uppsa extremity about 6 wide. It gradually tapers to a point at the junction of the Elk and north East rivers, along the borders of which, are many marshes.

South of Elktow, on the East side of Elk river, and indeed over the peninsula generally, there are numerous natural sinks on the surface of the land: in extent from a rood, to an acre, or more which from time immemorial, have been filled with water, until within the last few years they have become dry—

Deeming it unnecessary to enter more minutely into the medical Topography of the Town and adjacent Country, I shall now proceed to mention the diseases, and also to take some notice of the weather, that prevailed during the winter and Summer preceding the epidemic.

The

The winter preceding the epidemic was open and wet with but little snow, the Spring was cold and wet during which time (the winter and Spring) the Influenza became almost universally epidemic, it was perhaps as extensive an Influenza as ever effected the people of this country, scarcely an individual was exempt from it, in grater or less degree; in some instances it was very severe amounting to Pneumonia, but considering the number effected it was far from being a fatal disease.

The Summer was not remarkable for any prevailing disease, there were a few Sporadic cases of Cholera Morbus and dysentery, produced I suppose by improper diet, and by the constant action of the Caloric rays of the Sun, so debilitating the digestive organs as to render them incapable of performing their ordinary function. During the months of may & June the weather was remarkably

remarkably dry, and hot, the thermometer ranging from 86° to 98° between the 28th of June and 3rd of July, there was a long and violent storm from the North East which gave to vegitation of every discription a luxuriance of growth before seldom seen: the remainder of July was hot and sultry, during which a considerable quantity of rain fell, August and September, were dry, and hot, Oct. & November, were dry- the nights became cool about the middle of August, but there was not frost sufficient to arrest the disease until about the ~~the~~ first of November-

Discription of the disease.

About the middle of the month of June the Epidemic made its first appearance in the form of Bilious diarhea, which was ushered in with a slight chill followed by a constant fever, attended with frequent and debilitating

dejections

dejections of thin Bilious matter, which unless
speedily checked by the appropriate remedies,
soon reduced the patient to a state of danger
The pulse from the commencement in most
cases, was small and frequent with but little
tension- the tongue although generally moist,
and white, or yellow, at first; became dark,
and dry, in most cases, it was attended with
considerable nausea, and sometimes vomiting.
and in many cases it amounted to Cholera-
Early in July it assumed the Intermittent
type, commencing with a chill more or
less severe, sometimes amounting to a shake, which
continued from a few minutes, to an hour, or
more accompanied with nausea, and vometing,
followed by a hot dry skin, quick and rather
hard pulse, great thirst and severe pains in
the back, head, and extremities- after a continuance
of

of these symptoms for some hours- they were succeeded by a sweat more or less general, sometimes profuse, with a relief to all the symptoms.
The first paroxism generally commenced its attack in the morning, or fore part of the day, and continued throughout the greater part of the day and night, the second paroxism commenced in the afternoon of the succeeding day, and was less severe than the first, and not generally accompanied with vomiting. If neglected or badly treated the intermission became less distinct and the symptoms aggravated. Taken in time however, it generally terminated on or about the 9th day of the disease, the patient escaping the chill, and of consequence the fever, pain, sickness &c.
As the season advanced the disease became more violent and the intermission less distinct, all the symptoms were aggravated, particularly the

gastric

gastric distress, which was this season, the most prominent Symptoms. The attacks generally commenced with cholera, or severe vomiting, which continued during the fever and with it gradually declined. The Stomach would retain no fluids or solids of any kind, large quantities of bile were thrown up tinged with green, or of a deep yellow colour. In many cases blood was ejected in considerable quantities, and was generally favourable, producing almost an instantaneous relief of all the Symptoms, Some old persons however were carried off by the discharge.

The pains in the head and back were more severe, the arterial action more strongly developed and the disease altogether more inflamitory during the hot weather. When the cold nights commenced the fever became more continued and unmanageable. The Chills were then after the first one or two paroxism

paroxism, quite indistinct - the pulse less full and more frequent, the functions of animal life were more disturbed, and the symptoms altogether more typhoid. Many cases assumed the form of malignent Intermitents, the patient becoming comatose at the access of the chill and continuing in that state until the decline of the fever, and then gradually recovering the animal powers, with the accession of the sweating stage; at the commencement of the next paroxism the same symptoms occured, and continued to occur with every succeeding paroxism, until the powers of life were exhausted by the force of the disease, or until a favourable crisis was effected by the appropriate remidies. The most common course of the disease, however, throughout the whole season, I will now attempt to discribe. The patient was seized in the morning with a chill

or

or shake more or less severe accompanied with distressing sickness at the stomach, and severe vomiting of Bilious matter, followed by high fever severe pains in the head, back, limbs & epigastric region, a hot dry skin, great thirst and delirium, the head being in almost every instance effected, the tongue furred and yellow, the urine scanty and high coloured - after the continuance of the symtoms for about 6 hours, perspiration commenced and with it an abatement of the vomiting and other symptoms just enumerated; on the afternoon of the succeeding day the paroxism was ushered in with a slight chill, of short continuance without any vomiting, and followed by a fever which continued the principal part of the night accompanied with considerable thirst, severe pains, restlessness, watching and delirium follow-ed by a slight perspiration and a remission of

fever. On the next morning there was another severe chill attended with vomiting and all the distressing symptoms before described. In this manner the disease continued to occur until prevented by suitable remedies or until exhausted nature yielded to the powerful influence of the disease. About the beginning of August the Dysentery made its appearance on the hills 5 or 6 miles North of Elkton on the East side of Big Elk, attended with considerable mortality, but did not at any time approach nearer the lowlands than 4 miles. The Bilious fever prevailing at the same time in the country lying between the Dysenteric district and Elkton and for some time the diseases appeared to be contending for the preeminance; at length, however the usual form of Bilious fever prevailed, and the Dysentery retired before it. On the hills north and East of Elkton, and on the

the East side of the "Big Elk" for the distance of 100 or 15 miles, the fever was much more fatal than on the lowlands around Elktown. It may also be remarked (in passing) that the epidemic was much more prevalent and severe on the east than on the west side of the watercourses, this was owing I suppose in a great degree to the direction of the wind, which I have before stated blew almost constantly from the South West. On the west side of Elk river, in "Elk Neck" it was more healthy than usual, and much more so than on the opposite side of the same neck on the North East river, nor did the disease commence so early on the "North East River" as on the Elk River and the Big Elk creek. The inhabitants on the "Little Elk" were less affected than those on the "Big Elk", owing perhaps, to there being fewer Mill Dams on the former than the latter stream. The disease commenced earlier and was more severe also in the

East

east than the west end of Elktow. The epidemic of this season attacked all ages sexes and conditions - neither the infant at the breast, nor decrepit old age, were exempt from its ravages. The very old and the very young were its most frequent victims, having less powers of life to withstand its repeated shocks. Relapses were frequent, the least irregularity either in diet or drink, was sure to be followed by another attack. Convalescence was slow and tedious, the patient being much debilitated for a considerable time after the fever had been subdued, generally however the relapses assumed more of the intermitent form than the original attack.

Causes.

Concerning the remote cause (Malaria or marsh effluvia) I shall say nothing, in as much as I consider it to be of the same nature as that which produces our ordinary Remittent and Intermittent Bilious fever only presented in a

a more concentrated state and modified no doubt by the unexampled heat of the weather. But it may be asked why the disease prevailed so much more extensively this year than the preceding years: To this I would reply, that owing to the luxurient growth of vegetation the preceding Summer there was more vegetable matter to undergo decomposition, and hence more vegetable effluvia evolved.

The exciting causes of the disease were irregularities in eating or drinking, exposure to cold or night air, over exertion so as to produce indirect debility.

Treatment.

If called during the rise of the fever the treatment was commenced by bleeding the patient until the pulse yielded, or until the violence of the symptoms were relieved: from 10 to 20 ounces were the quantities most generally required. The head was much relieved by this operation as were also the pains and sickness. If

If the vomiting continued from 30 to 60 drops of Tinct. Opii. mixed with lime juice or vinegar or a Pill containing 2 gr. of opium, was given and repeated if urgent vomiting required it, until it was checked. Laudanum beat up with the white of egg, was directed to be rubbed upon the epigastric region, or a Poultice of bruised mint and brandy warmed, was directed to be applied to the same part. If the vomiting still continued or the pains were severe in the stomach, and pulse sunk, or if the opium was not retained and particularly if much blood was thrown up by vomiting, a blister was applied over the region of the stomach and liver, this scarcely ever failed to arrest it. Early the next morning an emetic of Ipecacuanha was given or Ipecac and Calomel combined, of each 15 or 20 grains so as to produce slight emesis, and a free cathartic effect. If this did not produce a free catharsis, a dose of the infusion of Senna, Sulphate of Magnesia and Supertartrate ~~Sulphate~~

Supertartrate of Potash was given every hour, until the bowels were freely evacuated; sometimes the Sulphate of Magnesia or Castor oil was used alone, if the Ipecacuanha was given alone, it was followed as soon as the Stomach became composed, by a large dose of Calomel. Solid food of every kind was prohibited, the drinks during the fever, were cold water, toast waters, apple water, lemonade and soda water, during the operation of the medicine and in the intermission and remission of the fever, weak teas as Balm or Hyssop, rice or barley water, &c, were given. During the next paroxism if the pulse would admit it, and the pains required it, the bleeding was repeated, and another dose of purgative medicine either Calomel alone or combined with Jalap or Rhei or Senna &c. was directed to be taken. To prevent the recurrence of these symptoms 60 drops of Tinct. opii mixed in vinegar and water, or lime juice, was directed to be given about an hour before the next

paroxism

paroxism was expected to commence. If this did not succeed in stopping the chill altogether, it generally checked its violence and lessened the vomiting, the fever also was shortened by it, the perspiration commenced much sooner; in short, the whole paroxism was rendered much milder by it. If the paroxisms continued to occur after the primæ viæ were well evacuated and particularly if they were anticipating paroxisms a Blister was applied over the region of the Stomach, and sudorifics given during the fever. The soda powders were preferred for this purpose to all other articles of that class: they not only lessened the arterial excitement and determined to the skin: but better than any thing else allayed the thirst and composed the irritability of the stomach; they were given cold frequently with ice, and swallowed as quickly as possible after being mixed so as to allow the extrication of the carbonic acid gas to take place in the Stomach. Spt: Nitre: Dulce: was also found

found to be a valuable diaphoretic, and if the irritability of the Stomach did not forbid it, some Antimonial Wine or a watery Solution of Tartarized Antimony, was added to it. Under similar circumstances, the common antimonial Powders were used, and if the bowels were not sufficiently free a small quantity of Calomel was added to each Powder.

Generally speaking however, the Stomach was too irritable to allow the use of any antimonial preparation. The infusion of the Eupatorium Perfoliatum was also given with advantage when the Stomach would bear it. If the fever did not still yield, Epispastics applied to the extremities scarcely ever failed to arrest it about the 8th or 9th day. The excruciating pain of the head and delirium frequently demanded a Blister on the back of the neck. It was not found necessary to repeat the Blistering more than twice, in most cases one Blistering was sufficient.

The

The bleeding was had recourse to in the rise or at the height of the fever, rarely in the decline or remission

Tonics.

Tonics were not required during the hot weather, and if resorted to most generally converted it into a continued fever. After the cold nights commenced, bleeding was seldom required, and if used the patient was apt to sink into a low typoid state, the pulse after that time was seldom tense or strong and the pains were less severe. After that time also, Tonics were resorted to during the intermission with success, the sulphate of Quinine in pills or solution was prefered generally: it was more greatful to the stomach and clogged it less than the Bark. Our native tonics as the bark of the Dogwood (Cornus Florida) Swamp Sassafras (Magnolia Glauca) Poplar (Leriodendron Tulipifera &c

Tulipifera &c. in decoction were used with considerable success by many persons in the country. In a number of cases the disease assumed a malignant form, and was more unmanageable; in some instances the fever continued with slight remissions and with out any perspiration to the last, the functions of animal life appearing to feel the principal force of the disease, the delirium was more constant there was great prostration and towards the close much starting, Subsultus, twiching, and picking the bed cloaths &c. After evacuations were premised, sudorifics and Blisters, together with a combination of opium, Ipecac, and Calomel in small doses, and frequently repeated produced the happiest effects.

When the heat was unequally distributed which often happened in the more severe cases, the extremities being cooler and the body much hotter than

than natural, the stomach and bowels being at the same time much swelled and tender to the touch, great benifit was experienced from the application of cold cloths rung out of ice-water to the body and repeated whenever they became warm, warm applications being made at the same time to the extremities. In other cases, a heavy stupor and stertorous breathing commenced with the chill and continued until the fever began to decline, when a profuse perspiration appeared to relieve the unfavourable symptoms, the patient becoming rational and able to swallow, in such cases Blisters behind the neck and to the extremities during the apoplectic state and large doses of quinine repeated every hour, as soon as the patient was able to swallow, soon broke the morbid association and restored the patient to health. I am informed that the form of the disease last mentioned occurred

occured frequently in this neighbourhood during the Epidemic of 1826.

General remarks.

The gastric distress was the most prominent characteristic of the epidemic; so great was the irritability of the stomach that evacuating medicines of every kind operated with great violence if given a short time before the exacerbation; emetics of every kind were inadmissable on the worst days, and the mildest only could be given on the better day. Thorough evacuations by bleeding, purging &c. early in the disease not only cut it short without the use of lowies, but prevented engeorgements and disorganization of the abdominal viscera and by unloading the portal circle, relieved the unpleasant sensation of fullness, which so much harrassed the patient. Free evacuations were attended with other advantages, relapses were not so apt to take place, and it prevented the discharge of blood by vomiting which often took place when bleeding from some

cause

cause or other had been neglected in the commencement of the disease. Several persons particularly old people were carried off by Cholera morbus occurring at the access of the fever, caused by improperly taking an emetic or cathartic, when they felt the sickness at the stomach commencing. Strong purges and sometimes even a dose of salts taken under similar circumstances produced an alarming diarrhoea. I have been informed that Dropsies have been more common than usual in that neighbourhood this winter, and that the subjects of them have been those in whose cases depletion was neglected and the tonic plan persued. I am also informed that those patients who were not bled, have suffered more since that time, not only by repeated attacks of the ague and affections of the liver and spleen, but by the winter epidemic, than those in whose treatment the depleting plan was adopted.

An

Inaugural Dissertation

On Scarlatina

Submitted to the Examination of the

Right Reverend James Kemp D.D. Provost

And to

The Trustees and Faculty of Physic of the University of Maryland

For the Degree of Doctor of Medicine

On the second day of April One thousand eight hundred and twenty seven

By:

Alfred I Foreman

of Talbot County State of Maryland

Scarlatina

It is supposed by many to be of modern origin, at least no mention is made of it until about the middle of the seventeenth century; when it prevailed at Rome, and was described by Prosper Marhamus an Italian Physician. Soon after this it appeared in London, and was noticed, both by Sydenham and Morton under the term of Febris Scarlatina

By other writers it is contended, that it first appeared in 1610, in Spain; it then spread into Naples where it raged for twenty years with great mortality its next appearance was in London 1689, In 1735 it appeared in our own Country, and spread slowly, but generally over it: which others apart that the disease which took this Course last described was the Cynanche Maligna that originated in 1610. and was called in Spain Garrotillo. From the confused description of the origin of the two diseases. it would rather lead one to suppose that in their first appearance they were not marked many essential symtoms of difference.
We find as it appeared in London. Sydenham describing it in a very mild form, while Morton who described the same disease. says it was very malignant

Although Dr Cullen in his system of Nosology has divided Scarlatina into Simplex and Cynanchica, yet observes that in forty years practice, he had seen it Epidemic six or seven times, & always appeared in the form of Scarlatina Cynanchica, attended with ulcerations of the fauces, and is inclined to believe that it never appears under any other form: Dr Armstrong is of the opinion Maligna is the Typhoid state of Scarlatina. and considers them nearly allied

Dr Withering states that in his early practice he considered them distinct, but more enlarged experience compelled him, to renounce that opinion, and says that after paying the most assiduous attention to the subject by observing the disease in every difference of season, age, and temperament, he was satisfied that they constitute but one species of disease, that they owe their existence to the same specific Contagion and that their greatest differences, are not greater than those of the distinct, and Confluent Small pox

Our able and distinguished Professor of the Practice of Physic in this Institution, considers them as separate diseases, and has given us the following symptoms of distinction, Scarlatina is Contagious and inflamatory, Maligna is not, the fauces are red in Scarlatina white in Maligna, attended with ulceration

Maligna is attended by fetid diarrhœa, and hemorrhagies from different parts of the body. Scarlatina is not; the eruption is not so uniform in its appearance, nor so general over the body. its not followed by that complete desquamation, and sarcous affection, which are fined in Scarlatina; it requires the stimulant plan of treatment; Scarlatina the depleting.

Dr Millon also considers them distinct, and enumerates a number of symtoms to distinguish each, he says that in Scarlatina, the eyes are red, and prominent, in Maligna, heavy, watery, and in the progress of the disease, fixed and glopy. there is a great degree of pain and difficulty of swallowing, scarcely any in Malig na, the fauces florid and swelled, in Malignant dark red or purple and covered with crusts of an ash, or brown colour. which soon degenerate into ulcers, eroding the neighbouring parts, in Scarlatina there is no acrid discharges, from the nostrils or intestines, in Maligna there are. in Scarlatina the face is red and swelled, in M. pale and bloated, or shrunk and cadaverous, in Scarlatina the mental functions are not often disturbed, the eruption in Maligna is uncertain in its appearance, unsteady

in its duration, partially diffuse, and of a pale or purplish hue, and terminates in but a very imperfect desquamation, which like its appearance brings no relief. in Scarlatina the eruption is more uniform and steady, and ends in complete desquamation. But it is admitted by most all Physician that Scarlatina may under certain circumstances assume the symptoms, and require the same mode of treatment that C. Malegna does, - this is the case when it occurs in low, damp, situations, among the lower order of persons, who are badly fed and cloathed; whether they are different or not is a matter of but little importance in a practical point of view, the Physician must be guided by the symptoms in his treatment of this disease, not by name. As to the nature of this affection it appears to be inflamatory. this is the opinion of Dr Wells - and in this opinion he is supported by later pathologists. With respect to the exciting cause, it is believed by writers to be a specific contagion, yet it does not prevail in every respect as a contagious disease. Dr Sims says he has seen it wholly at a stand. during some days of a hard frost -

after which it seemed to recover new vigour; in a real contagious disease we do not find that the heats of summer, or the cold of winter, has any influence in putting a stop to its progress: it follows very (Scarlatina)
much the course of an Epidemic, dependent on the atmosphere for its existence, and propagation, and ceasing when that peculiar state of the Atmosphere which gives rise to it, is removed. Children are more subject to it than adults and said by some to be peculiar to them - and those of a lax habit of body, than the more robust - females are more liable than males, Dr Sims, says, that girls from two to eight years, are more subject to it than at any other time.
This statement is confirmed by that of Dr Fothergill, but denied by Dr Clark. It generally appears about the middle or later part of summer, and disappears in the Spring. Persons in or from it appears with the greatest severity are those of debilitated Constitutions, Dr Clark in speaking of the circumstances which determine the severity of the disease, observes the remote and external causes, which had the most obvious influence, might be reduced to three

namely, the heat, and moisture, of the air, and effluvia arising from many persons being crowded together in the same house, or often in the same room.

With respect to the disease attacking a second time it is asserted by some that it never does. Bang says he never knew it to happen; it appears that Scarlatina properly so called, in which the eruption is complete never does attack a second time, but where the eruption is imperfect, and the affection of the throat considerable, a second attack may take place. I shall now give the symtoms of the different species as laid down by Authors, And first of Scarlatina Simplex it commences with slight febrile symtoms, the eruption appears on the second or third day first about the neck and face, in the form of little points, which in a short time soon the whole body, the colour of the eruption is a bright scarlet, being most distinct about the joins and bendings of the joints. the efflorescence spreads over the surface of the mouth and fauces and the papillæ of the tongue, which are elongated extend their scarlet points through the white fur-

which covers it; thus affording one of the simplest diagnostics of the disease, the face is often swelled about the third day, the febrile symtoms are in many cases slight: at other times there is considerable heat of the skin, acceleration, and frequency of the pulse, the eruption continues about four days and then ends in desquamation.

In Scarlatina Anginosa, the precursory symtoms are more violent, and, together with the cutaneous efflorescence, an inflamation of the fauces appears, going through its progress of increase and decline along with it; amongst the first symtoms is an uneasiness of the throat, the voice is thick, and deglutition difficult, and painful, the tonsils and fauces are red swelled, this goes on to imperfect ulcerations or specks; when these are numerous they cause an unpleasant fator, and the throat is clogged up with viscid phlegm, the eruption comes out about the third day, in scattered patches always very distinct about the elbows, it frequently disappears, and reappears partially, and at uncertain periods, about the fourth it goes off.

and extensive desquamation of the cuticle takes place, the febrile symtoms in this form of Scarlatina are usually very severe, and of a highly inflamatory character. there is always much langour, and dejection of spirits, oppression of breathing. the decline of the disease is attended with marks of great debility

There is said to be a third species, which prevailed at London 1745 and described very accurate by Dr Fothergill, it is termed the malignant Scarlatina, the symtoms which characterized the disease, are those precisely of Maligna, there is not a symtom attendant on Maligna but what is mention by Fothergill, as having attendanced the malignant Scarlatina; why then should it be described as a distinct species?

The danger attending Scarlatina, depends on its assuming the symptoms of Maligna, in the simple scarlet fever, there is scarcely any danger but when it comes on with great anxiety, nausea and vomiting, the fauces of a dark red or purple-

the deglutition easy and attended by little or no pain, it approaches the nature of Cell- and in proportion to this, is the danger-

The treatment to be adopted must be of the depleting kind, the lancet in the inflamatory stage should be the main support. Emetics are very useful in the first or forming stage Dr Hamilton recommends in the higher terms the use of purgatives- Dr Currie speaks very much in favour of cold effusion, when the excitement is great- this practice is adopted by Hoffman, Reid, Armstrong, and others- When the Scarlet-fever approaches the nature of Maligna, the treatment to be pursued, is the same as in that disease which is the Stimulant-

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On

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Submitted to the examination

of the

Right Revd James Kemp. D. D.

Provost —

Regents and Medical Faculty

of the

University of Maryland

For the

Degree of Doctor of Medicine

By

Jesse Simkins of Virginia

A. Member of the Medical Alumni Society

of Baltimore —

1827.

Preface.

That Man does not act, but under the influence of Motive, is a position so plain and evident, as almost to be entitled to the appellation of an axiom, and so universal is its application, that whenever we see a man coming forward, under whatever garb it may be, the mind, in a moment (as if by instinct) turns to the cause of his acting.

This principle will of course be referred to my own case, and when known, that I have chosen for this Essay a subject so comprehensive, and one involved in so much obscurity as that of Scrofula, the natural inference will be that much time and labour has been devoted to its investigation, and that therefore some hitherto unrevealed facts are about to be brought to light.

It is with a view of preventing any such erroneous conclusion, that this Preface is introduced.

In quest of materials I have read no learned dissertation, nor elaborate treatise - Nor has my limited experience put me in possession of any facts, that have not before met the observation of others - hence the ideas which I have received on this subject are only such as have presented themselves during a short course of general study, together with attendance on Medical Lectures, the source of both I shall cheerfully acknowledge, but particularly the latter with pride and pleasure

u Alast the Moment of his breath
the lurking principle of death
ing Disease that must subdue at length
with his growth and strengthens with his strength"

Scrofula

In contemplating that black Catalogue of ills which belong to Humanity. We meet with few more common, None productive of more distress, and. None that furnish more sad and melancholy proofs of the imperfection of our Art, than that which is commonly denominated Scrofula or Struma.

To the benevolent and philanthopic mind it is painful to know, that Mankind, even by Casualty are obnoxious to a formidable train of Evils, and that many and various avenues are made to the Grave. by their own intemperance and vices, but how much more sorrowful is the reflection, that even in Embryo. is implanted in their Systems the seeds of affliction. which when they shall have been placed in another and new sphere of life. are ready to sprout forth and yeild an "hundred fold" with the slightest tillage. Such is the Case. with the Habit of which I am about to speak. That the innocent and unoffending Babe. is here doomed to inherit the weaknesses of his Father. is alas! too true. a weakness which it is to be feared. the powers of Medicine can never eradicate. That the Disease then is hereditary No enlightened Pathologist pretends to deny. and that this is a very extensive (if not the chief source of it) may with equal certainty be admitted. Having said thus much we might go a little further, in search of the original Cause of this loathsome Malady. We might recur with some degree of probability, to Climate, Atmospheric peculiarity, Luxury, or Void. but as we have no disposition to encroach on Speculative grounds. we shall endeavour to confine ourselves with such facts, as present themselves in a plain and indisputable light.

"Whether says Dr Cullen. this disease may

not fail to appear in Children of Scrofulous Parents, and discover itself afterwards in their Offspring in the succeeding Generation I can not easily determine, but believe it has frequently happened." That the more prominent features of the disease "maybe absent in Children of Scrofulous Parents." we are not disposed to deny. but that these symptoms may and do often appear in the succeeding generation, where no struma lurked in the second is to us rather problematical.

The age at which this disease is most fully developed is between the years of three, and seven, from that to puberty. but that Scrofulous affections after this period "are a rare occurence" we are also disposed to deny; otherwise whence so many cases of that approbium Medicorum, Phthisis Pulmonalis.

The symptoms denoting this disposition are, soft, flaccid habit, fair hair, blue eyes, complexion florid, smooth, delicate skin, almost transparent so as to display the windings of large blue veins beneath it. tumid, and pouting upper lip with a sulcus or chop. extending sometimes as far up as the Columna Nasi. abdomen frequently swollen, Enlarged conglobate Glands. particularly about the neck and Jaw. called vulgarly "waxen Kernels." these continue three, four, or even twelve months, sometimes ulcerating. discharging a flaky. viscid matter resembling the white of an Egg. "Often says Dr Cullen, the Disease is joined with or following Rickets." but we are disposed to believe, with our able and learned professor of Anatomy. that Rachea itself is but, Scrofula: ~~manifesting~~ making its ravages on some particular kinds of organization, and that we may as well expect a Majestic Oak. without having first

planted the Acorn as look for a well marked Rachea, where no Strumous taint existed. We have mentioned among the symptoms the peculiar predilection, which this disease has for the lymphatic absorbent system. why this should be the case we are unable to say. We cannot say why the Variolous poison should lay itself on the Skin, nor why the contagion of Mumps should invade the Parotid Gland; such however is the fact and when we say that these poisons possess an affinity for the peculiar texture or organization of these respective parts, we have gone to the "Ne plus ultra" of our knowledge. These are not the only parts greatly predisposed to Scrofulous affection. The parts about the Joints viz the Spongy heads of the Bones. Ligaments &c &c are very liable to this attack and they present us with a very formidable and dreadful train of Diseases. Morbus Coxarius. Anthrocace Spina ventosa. Gibbus Spina. &c &c. These we shall touch on after having said something of the treatment necessary in general Scrofula.

"Among all the diseases that man is heir to, none have excercised the ingenuity of Slaves on the one part, or of Fools on the other, more than Scrofula." In the earlier ages of the World when ignorance and time-Barbarism overspread the Land, and particularly when medical Science was enveloped in clouds of obscurity and darkness we find this disease opening a wide and extensive field of Superstition, accordingly long since the days of Edward the Confessor it has been wielded as a powerful Engine in the hands of Kings and Monarchs to impose on the credulity of their subjects.

The absurd and ridiculous belief that the Royal touch was alone capable of effecting a cure, has hardly yet ceased to infest the lower Orders of Mankind in some part of the Monarchical World

Nor are we surprised at this reflecting on the complete state of darkness in which these men have been kept by the policy of their Rulers. But that some of the most distinguished medical Physicians of the Age should have fallen into the error (as it is evident from the Work of Wiseman) is truly astonishing. However these absurd notions have long been on the wane, and fortunate for Humanity are now nearly (if not wholly) dispelled by the benign Beams of Education and refinement.

But while we have cause to rejoice that we have shaken off this "Noble Prerogative" as I would say, this barbarous fanaticism we have to regret that ignorance and empiricism are so much disposed to lay their awkward hand to supply the deficiency.

If we are to judge from the number of wonder working Nostrums, Panaceas, and Catholicons that are daily proclaimed to the world. for the Cure of "Kings Evil" we have not yet outstripped the "Jactura Regis". But happy and I to add, that neither do these forms any part of the treatment of the enlightened Practitioner and Pathologist - a treatment which tho' ineffectual in eradicating the disease, is found sadly to alleviate the sufferings of Mankind.

Scrofula. I have already said that a disease of the general system, consisting principally in debility or want of complete development in some of the powers of life, which when duly equalized, & distributed in just proportion to every organ of the Economy, constitutes perfect health - Hence it is plain that our indication of Cure must be to supply this deficiency, - to bring about by artificial means. "What nature in her wisdom has denied". This is to be accomplished by the

carefull and prudent administration of such remedies, as have a tendency to restore tone and energy to the system, by temperance and the strictest avoidance of all those causes capable of calling into action this lurking and insidious principle.

Tonics. In the treatment of this disease, these medicines have been too indiscriminately employed. Not but that they are always indicated; but for that unaccommodated to the debilitated of the System. they serve rather to oppress and overwhelm the already enervated fibre, than restore the tone. Hence in making up our minds as regards the quantity and quality of these Medicines (as in all other cases) we should be governed by the state of the System.

Of the individual Tonics. The whole class of Minerals seem to have been employed. and no doubt most of them may be advantageously used at particular times. All the preparations of Iron have been tried. The Muriate of Barytes and Lime have been highly praised by Crawford and Hufeland. and still more recent and high Authority might be adduced in favor of their utility.

The Peruvian Bark and Aqua Calcis come highly recommended also the preperations of Zinc Flowers and Sulphate — We are not disposed however to advocate any particular one, nor indeed any at all in many cases. When the disease makes its appearance in early infancy. we should prefer to give tone and vigour to the System one good breast of Milk. to the whole tribe of Tonics.

Cicuta, Digitalis and some other of the Narcotic class have been used as palliatives in this disease, when connected with local injury with much advantage —

The preperations of Mercury. when used with care and moderation, so as not to affect deeply the System have

been productive of great good. Of the whole of them I should prefer the Sub: Mur: Hydr:—

Attention to the Bowells is of course highly necessary, with this exception, our chief reliance is in Cold Sea Bathing, Mineral Waters, Moderate exercise in a Carriage, light but nutritious diet, and promoting the natural warmth of the Body by Flannels etc, to this we may add, keeping the Mind cheerful and tranquil, as much so as is consistent with the nature of the disease, occasionally the warm bath, whisky bath, and friction on the Surface, in fine whatever is calculated to diffuse energy and vigour throughout the system may be used with advantage.—For this purpose good nursing forms a very distinguished means—

Having premised thus much of the general treatment of Scrofula, I will now proceed to notice in a cursory manner a few of that large class of diseases which belongs purely to this family, flowing from the same fountain and partaking of the same nature as their Alma Mater

Anthrocace When this disease displays itself in the Joints, more particularly the Wrist, Elbow, Ankle or Knee it is called by this name, or vulgarly "White Swelling" a name not very insignificant as it expresses that absence of red colour which the tumefaction presents, and which distinguishes it at once, from Rheumatic, and other inflammatory affections, to attacks of which these Joints are liable.* Independent of this "Swelling" and whiteness the Skin presents a shining smoothness with the appearance of blue distended veins: the pain is continued and not so much increased on slight motion

as is the case in Rheumatism, as the disease advances collections of matter form around the Joint, which sooner or later makes its way out by one or more openings. The Matter discharged is thin and flaky. Authors generally enumerate two species of "white Swelling" Rheumatic and Scrofulous, but as already said, we believe it to be purely the Child of Scrofula, manifesting itself here only in consequence of some exciting Cause.

That these Joints as well as all others in the System are liable disease and decay from injuries we do not pretend to deny. but this presents us with something very different from Arthrocace and consequently from what we have to treat of here.

Treatment. In addition to the treatment already laid down in general Scrofula, we are to direct our attention to the local remedies, of these First in point of worth is the establishment of a drain as "near the part as possible" This may be done by Blisters, Setons, or Issues; the latter we prefer, because more manageable and productive of less pain also a freer discharge can be kept up. The object of this Drain is to carry off that superfluous quantity of Juice which the System has been in the habit of manufacturing and which unless evacuated by some other and less important points, will fall upon those that are already weakened. A Horizontal posture, and a perfect exemption from all sorts of exercise should be persevered in. The diseased limb should be elevated. the utility of this practice it is almost impossible to conceive. it has succeeded when every thing else which could possibly be devised by the ingenuity of man had failed. it can only act by favouring the return of blood from the limb and preventing the too free afflux of the same

fluid into it — The Bowells should be kept open and regular.
There are some other auxiliary Measures, such as, Washing with cold salt water; Friction with the dry hand, stimulating Liniments, all of which may sometimes do great good —

Often however this disease defies all our Skill, and the patient worn down with Hectic, is compelled to submit to an operation to save his life. This is to be done with caution, it should be the last alternative, and never performed while the slightest hopes of otherwise saving life can be entertained. The loss of motion in the joint should have no control in forming an opinion on this head. For it is far better that our patient be left with Anchylosis than with no limb at all. Nor need we fear deferring it, untile the patients strength is too far gone to bear an operation — The experience of Surgery proves, that a person worn down with a chronic disease would bear an Operation much better than one in perfect health and vigour, and that in diseases of this kind it is not to late to operate even when the patient is on the confines of Eternity

It has been laid down as a Rule, that a Joint should be always interposed between the disease and the point of operation: but this is often impracticable, as in the Knee, and even were it practicable we doubt the propriety. it is perhaps a command (like many others in Science) founded more on Authority than Reason

Morbus Coxarius

This disease is very insiding in its attack frequently

The only precursors are a slight weakness and limping of the affected side, when the person attempts to walk. he will throw his leg awkwardly out, instead of moving it directly forward.

with the Toes introverted. The next evidence is a pain in the inside of the knee. a most certain diagnostic, but one which has induced the unwary practitioner to mistake the seat of the disease — a mistake the more to be regretted as it frequently deprives the patient of his only chance of arresting the disease in its incipient stage. One of the earliest symptoms after the disease is fully established is the wasting away of the Limb, the natural consequence of the Muscles being out of use, The pain about the Trocanters now becomes evident and is greatly increased by pressure, — An Elongation of the Limb always takes place in the early stages of the disease, but subsequently (when Ulceration and consequent wasting of the head of the Bone, Cartilage etc. shall have taken place,) the Limb becomes Shorter; This is owing to a dislocation of the head of the Bone, backwards and upwards on the Dorsum of the Ileum, drawn there by the Glutei muscles. There is no danger of mistaking it for dislocation from violence. When suppuration has taken place the matter generally presents itself somewhere in the vicinity of the Joint.

The Treatment of Morbus Coxarius is similar to that of the Knee disease, — and all that was said there may be applied to this. — Our means must be prompt. and our remedies rigid a complete state of quietude in the horizontal posture observed. — Should we here prove unsuccessful, we have no resource left in the Knife, and the Unfortunate Sufferer is doomed to gaze on an Eternity into which he must soon inevitably sink without the slightest hope of succour —

Another dreadful form of this Disease when it invades the Bodies of the Vertebræ, producing gibbosity

of the Spine with all its distressful concomitants.

Our streets present us daily with many sad and melancholy examples of the ravages of this disease, examples calculated to awaken sympathy and elicit every humane and benevolent feeling of our nature. It is this disease which so often blights the fondest hopes of the parents by converting the innocent and interesting and promising child into a deformed shapeless and almost inhuman form, and it is this disease which often "trying the soul" of the Physician drives him to the lamentable acknowledgement, that it is almost wholly beyond the control of his art. It is unnecessary to enter into a minute detail of the symptoms as it is always sufficiently evident from the gibbosity connected with such cases as marks as have been already laid down, some of the premonitory signs however I will mention, as an attendance to them will often (teaching us to anticipate danger) enable us to avoid or at any rate prepare for it. For some time previous to the more obvious symptoms, the child has been observed to be languid, listless, with great aversion to all sorts of exercise. Frequently when walking to trips and stumbles when no impediment lay in the way, and on attempting to walk quickly his legs would involuntarily cross each other, and fall to the ground the consequence. When standing also unsupported his knees would totter and bend under him. Twitchings of the thighs, and uneasiness at the pit of the stomach to these succeed the more manifest symptoms, Gibosity. etc.

Treatment

Treatment - The most enlightened surgeons of the present day have discarded from their practice all those artificial and enlightened officious attempts to support the Spine where were a few years ago so much the rage - The Universal want of success with the Back-Boards, Steel Spine, Screw Chair, Go Cart &c, have induced all, save a few hot headed and enthusiastic admirers to lay them aside, and fortunate for Humanity would it have been had some Davidge-like Spirit arose long before it did to assist the illustrious Pott in condemning them. They cannot be called the "Lumber" of Surgery" because they have not been useless -

By trammelling those parts which nature intended should be free and unconfined, and thereby adding fresh causes of Mischief to those already so deeply rooted in the System, they may be said to have introduced truly a "Pandora of Evils." without having one solitary ray of good to adhere to the bottom of the Box - Of the truth of this the Records of Surgery too well attest -

- Is then we have discarded "in toto" these supposed instruments of relief what are we next to do? Shall we stand by, behold calmly this terrific disease preying upon the innocent and unoffending Babe, and shall we resist the pathetic entreaties and appeals of the parent without interfering? I Answer Yes. so far as instruments are concerned - and indeed I had almost said we must do nothing: We are to rely principally on general invigorating measures, such as nutritious diet, (good Breast of milk), cold sea bathing, exercise in a Carriage, in a horizontal position warm dressing &c. together with the use of Issues on each side of the Spine. Many other diseases of the Scrofulous Family we might notice would our limits allow, The general treatment however is the same in all.

To the Medical Professors of the University of Maryland

When about to quit an Institution, at which I have received the Rudiments of my education, Where I have heard with so much pleasure the arcana of Medical Science unfolded; and when I have lately been wont to listen to their valuable precepts, & its sage Tenants; it is but natural that a degree of melancholy and and regret should overspread my mind — Such I assure you is the fact, and doubly sorrowful it becomes by the reflection that in all human probability, I shall never again visit those walls, & that Dome, to which I have hitherto repaired with so much cheerfulness and delight. — Let me then take this last opportunity of expressing my heart-felt approbation of the talents and talents of those Professors under whose guidance the Medical Department rests. and also allow me to tender my warmest wishes for your prosperity both individually and collectively — with assurance, that thro' my future life, my utmost exertions shall be called forth, in support of that School of which I have had the honour to Graduate

Author

An

Inaugural Dissertation

on

Croup

Submitted

To the examination

of the

Rev. James Kemp, D.D

Provost,

The

Trustees and Medical Professors

of the

University of Maryland

For The

Degree of Doctor of Medicine

By

James R. Mitchell of Maryland

On the

Eleventh Day of March

1827

To

Nathaniel Potter, M.D.

Professor of the Theory and Practice of Medicine,
in the University of Maryland;

The Following Pages

are

With sentiments of the highest veneration
for his talents,
Respectfully dedicated;

as

A tribute of friendship, gratitude, and esteem,

By his pupil

James R. Mitchell.

Cynanche Trachealis

This disease is placed by Dr Cullen in his class pyrexia, order phlegmasiæ and genus cynanche. (Derived from κυων a dog and αγχω to suffocate or strangle; so called, because dogs are said to be subject to it.)

This disease has been called by a great many names: by some cynanche stridula. Suffocatio stridula. Morbus Strangulatorius. Angina Polyposa vel membranacea. Cynanche Laryngea.

Croup consists in an acute inflammation of the mucous membrane of the trachea, generally attended with a secretion of coagulable lymph lining the trachea: That this is the true pathology of the disease is proved by dissections. That it does not depend on a spasm of the muscles of the glottis, as some have supposed, it is evident from examination of the larynx and tra-

chea, that the muscles are incapable of closing the glottis,
Croup is produced by exposure to cold, and hence is most
prevalent where the vicissitudes of temperature are most
frequent; particularly in low and damp situations as on the
sea coast, the banks of rivers &c. In temperate climates it
is most frequent in winter and spring, though it occurs
in all seasons.

Children from one to five years of age are most
subject to this disease; though it is frequently met with
as late as the age of puberty, and occasionally in adults.
The almost complete exemption from this disease, enjoy-
ed by adults, is perhaps to be referred to the complete
evolution of the trachea at the age of puberty, effecting
such a change in the membrane, as renders it capable
of resisting the remote cause.
In children who have had an attack of this disease,
there remains an increased susceptibility of the part,
to the action of the remote cause; and hence they are subject

to a renewal of it from very slight causes, and in proportion to the frequency of the attacks, so is the facility of its recurrence. It is often founded on hereditary predisposition, which depends frequently, though not always on scrofula. The symptoms of croup are often preceded by those of catarrh: but the patient is frequently attacked suddenly by the symptoms peculiar to this disease. It generally comes on towards evening, or during the night.

The child wakes with great difficulty of breathing, hoarseness, a shrill, ringing cough, which has been compared by some to air passing through a brass tube, or the barking of a small dog, or fox, and depends on the diminished diameter of the trachea, or the tension of the inflamed muscles.

The patient also experiences a sense of pain about the larynx the respiration is difficult, and laboriously performed, the inspirations, particularly after coughing, are attended with a whizzing sound, the abdominal muscles are violently exerted, whence the name of heaves, or hives. There is an uneasy sense of heat, attended with thirst and extreme restlessness. The pulse is frequent, and hard, sometimes depressed. The cough is generally dry, though there is occasio-

nally an expectoration of portions of a membrane with mucus. This is a secretion from the inflamed vessels of the trachea, which is the fibrine of the blood, and appears semi-organized, similar to what we see, where adhesions are formed between membranous parts. It generally arises below the larynx, and extends to the bifurcation of the bronchia, Dr Jos Potter says, even throughout many of their external ramifications into the smallest air cells. If we macerate the membrane found in the trachea in water, & thus separate the internal softer parts, we find it to consist of numerous rectangular fibrous lamella completely identified with the fibrine of the blood collected by stirring it while flowing from a vein with a rough body, the red globules being washed off. Chemically treated they correspond unless we say the membraneous matter imparts rather the character of of albumen: but fibrine and albumen are so nearly allied that it is almost impossible to say in what the difference consists. Perhaps the latter contains the greater proportion of alkali, which renders it more soluble in alkali water.*

*Surgery's Practice Vol 1st page 358.

The formation of this membrane is frequently attended by a throwing back of the head of the patient, in order to put the trachea on the stretch; but it is not to be considered as a necessary consequence of the disease, although it generally attends it. "The condition of the vessels is sometimes incompatible with secretion, and the vessels are frequently found injected with red blood only."

Croup has been divided into the idiopathic and symptomatic; the idiopathic, or original inflammatory affection of the trachea and bronchia, and the symptomatic which follows the aphthous sore throat, the measles, small pox, scarlatina. The inflammation in Cynanche Tonsillaris, Pharyngea, & Maligna frequently extends to the trachea and produces this disease — and sometimes the inflammation of the trachea extends to the bronchia: it is then called bronchitis and to the lungs producing pneumonia.

When the difficulty of breathing diminishes, the cough becomes less troublesome, the skin moist, the expectoration freer, and the fever abates, the patient generally soon recovers, but when the symptoms are aggravated the patient dies.

Profr. Potter. Prac. Pract. Vol. 1 Page 358.

this disease, when left to nature, if violent, generally runs its course in thirty six or forty eight hours, and almost invariably proves fatal, if the more violent symptoms are not removed or mitigated in the first twelve hours, by the energetic use of the lancet and other remedies.

"Dr Cullen observes, that when this disease terminates in health, it is by a resolution of the inflammation, by a ceasing of the spasm of the glottis, by an expectoration of the matter from the trachea, and of the crusts formed there; and frequently it ends without any expectoration, or at least as only attends an ordinary catarrh. When fatally, by a suffocation, seemingly ~~effected~~ depending on a spasm of the glottis; but sometimes probably, depending upon a quantity of matter filling the bronchiæ. We have before observed that it is impossible for the muscles to close the glottis; but if suffocation depended on a spasm of those muscles, would not the the relaxation which occurs before death produce relaxation of the muscles? And why do antispasmodics aggravate the disease?

Cullens First Lines Vol. 1st Page 177.

The remedies for this disease are bloodletting, emetics, calomel, the warm bath, [illegible] blisters, and tracheotomy Whatever difference of opinion there exists among pathologists concerning the pathology of this disease, they all concur in recommending the antiphlogistic treatment to a greater or less extent. Bloodletting is by far the most important remedy; and in the more inflammatory forms of this disease it is indispensable; we must be guided, as to the quantity, and to the frequency of having it, by the effect produced. There is sometimes very great difficulty in bleeding young children in the arm, in consequence of the smallness of the vein, & the great quantity of adipose matter; we should then open the temporal artery which may generally be easily performed. After general bleeding, or where there is any objection, or in milder cases we may resort to leeches with advantage; The objection to this method of abstracting blood, by Dr Dewees, is certainly one of considerable importance, that of the exposure of the part to cold, the slowness of the operation, and the uneasiness of the patient; therefore wherever it is in our power to bleed generally it is to be preferred.

The sensibility of the stomach is often very much diminished, which is always relieved by blood letting.

After blood letting, emetics are the remedies which should be employed; they operate mechanically by removing the accumulation of effused fluid from the trachea; and by the nausea they produce, diminishing the action of the heart, and increasing the simplicity of the skin. They contribute in a great degree to lessen inflammatory action. In the forming state, or in mild cases of this disease the free operation of an emetic will at once arrest it.

A great many emetics have been recommended, and employed, as ipecacuanha, lobelia inflata, squills, and many others; but the one best adapted to this disease, is the tartrite of antimony and potash; its operation is more powerful, it reduces the action of the heart and increases the secretion on the skin more than any other remedy of this class; and frequently operates on the bowels.

The sanguinaria canadensis has been highly praised as an emetic in this disease, given in the dose of two or three tablespoonsfull of a strong tea. Frequently the insensibility of

the stomach is so great that we shall be unable to induce emesis by ordinary emetics: In this state, the Corrosive Mur. of mercury has been employed, and sometimes with success. Proffr. Potter says that in this state of the stomach, and where the effused fluid impedes the passage of air into the lungs, the sublimate, in the quantity of one grain to an ounce of water, and a tea-spoonfull given every fifteen or twenty minutes, affords a prompt, safe, and efficacious emetic. It frequently excites a soreness in the gums, but rarely a profuse salivation. The Sulphate of copper has been employed. The Senega has acquired considerable reputation as a remedy in this disease. Dr Archer of this State first introduced it into practice. It is too stimulating to be used when there is much inflammatory action; but after this has been reduced, and there continues a considerable secretion without general fever, or when hoarseness remains, the senega by producing emesis, and stimulating the weakened vessels will frequently produce a beneficial effect. A tea made of onions may be employed under similar circumstances, and is very highly spoken of.

calomel holds a distinguished rank in the list of remedies for this disease. This plan was recommended by Dr. Hamilton of Edinburgh. He gave a dose of calomel every hour, till the breathing was evidently relieved, when it was gradually discontinued. It generally occasioned both vomiting and purging, and the first alleviation of symptoms generally followed the discharge of a great quantity of dark green coloured matter. The dose was regulated by the age of the patient during the first year one to two grains, increasing the dose one grain for every year. He gave it to the extent of one hundred and thirty three grains in sixty hours, to a child of seven years of age with success. In every case when it was employed, previous to the occurrence of lividness of the lips and other mortal symptoms it has succeeded in curing the disease, & preventing any shock to the constitution.

The Prof. of the Practice in this institution speaks in the highest terms of the free use of Cal. in this disease, and has given it to the amount of a hundred grains, with thirty eight of tartar emetic in twelve hours, to a child eighteen months old, and says where he has followed this practice he never

lost a patient. He recommends it in combination with tartar emetic, to be given until the pulse is nearly imperceptible. The good effects of this remedy when administered in large doses depend on the extreme nausea it produces, which is much more distressing, and continues longer than that produced by the ordinary remedies.

It operates as a cathartic very copiously, but if the bowels are constipated we should use enemas.

The warm bath may be employed with considerable advantage after the free use of the lancet when the skin is dry, and the difficulty of respiration great: by relaxing the skin, and increasing the perspiration, it will relieve the difficulty of breathing.

Blisters may be also resorted to after the action of the heart has been sufficiently tamed by the use of the lancet and other remedies; but we must be careful not to employ them too early, as they would increase the inflammation.

The operation of trachrotomy has been employed when the patient was in immediate danger of suffocation, but it has

rarely succeeded. If we could tell when the inflammation is seated in the upper part of the trachea and larynx, we might probably succeed much oftener: but as the inflammation frequently extends through the whole mucous membrane of the trachea and bronchia, the operation will aggravate the inflammation generally.

Inaugural Dissertation

on the

Pathology and Treatment of Burns,

submitted

to the

President and Trustees,

Provost and Medical Professors

of the

University of Maryland

by

William Keerl of Baltimore

for the degree

of

Doctor of Medicine.

Session 1827.

The part generally affected by these injuries, is that, which of all
those possesses the greatest degree of sensibility & growing out of
the peculiarities of constitution, whether natural or acquired, the
degree of sensibility is remarkably unequal in different individu-
als. We have recorded many illustrations of this fact in the pu-
nishments inflicted, in maritime & military discipline, a simple
lash being infinitely more terrible to one man, than two or three
dozen to another, & in medical practice we have opportunities of
observing the extraordinary difference of individuals, in the sus-
ceptibility of their external surface to painful impressions—e.g.
the effects of a blister being much more formidable to some than
to others. Where this insensibility exists either ice or turpentine
may be used indifferently, & it is more than probable that the
hardy miners, upon whom Dr Kentish practiced, possessed
natural insensibility, which caused him to use with effect the
turpentine applications. In the inhabitants of populous cit-
ies, we have seldom so much force or energy of constitution;

con-

consequently neither see or turpentine can be so universally applica-
ble. A middle or more cautious course must be pursued, & experience
has clearly established, that either extreme is attended with conse-
quences highly pernicious.

The degree of danger in burns, is then depend-
ent on the extent of the mischief, principally as to surface, & the pe-
culiar constitution of the patient, connected with a greater or less
degree of sensibility of the skin, or the part burned. We know that
the palms of the hands & soles of the feet may be rendered so callous,
that iron heated to redness can be borne in contact with them,
one sees this in blacksmiths & other artists employed in the work-
ing of metals. A washer woman, hatter or dyer will plunge their
hands into water heated to the 212°, whilst water very considera-
bly below the boiling point will produce vesication in others un-
accustomed to its impressions. Hence the great object of attention
will be the part burnt, the extent of the mischief & the irritability
of the subject. The greatest consideration is the relief of the
pain

pain by which the local & constitutional consequences will be overruled.

If the constitution be very irritable, the soothing plan ought to be pursued, opium in sufficient quantity to diminish the sensibility should be immediately given, it diminishes the susceptibility of the nervous system, & prevents inordinate excitement; lime water & linseed oil, or linseed rubbed down with litharge or milk & lime water will be perhaps the best local application, whatever local mean we may select, we should remember that its good effects will depend upon its soothing influence & should it fail to accomplish this end, it should be replaced by another.

In all severe cases, opium & cordials will greatly contribute to the patients safety. A point upon which great stress is laid, & which consequently should not be forgotten; is, never to open the vesications, as the pain is constantly increased by so doing; as we should infer would be the case from exposing the highly sensitive surface of the true skin.

After the first stage has passed & the sup-

purative

curative tendency becomes manifest, poultices should be applied, care being taken not to continue them too long; as the suppurative process when once established, is apt to become extremely profuse, & requires to be rather checked than encouraged.

When the suppuration is profuse, chalk should be laid on, until no vestige of moisture remains. The prepared chalk of the shops finely powdered, should always be used, some recommend Lapis calaminaris.

When the suppurative discharge is profuse & the strength of the patient suffers, a cordial plan should be pursued, light & digestible articles of food with porter, or wine; in addition to which we may avail ourselves of bark & mineral acids. When the weather is good, the patient should always be allowed fresh air, & exercise, if his condition will admit of it.

When the suppurated process has been of long continuance & the system weakened; the granulations which are formed, are apt to be exuberant & flabby. To remove this local weakness, a solution of the sulphate of Copper or Nitrate of

Silver will be amongst the best remedies, under such circumstances the lotions should be used strong, the former in the proportion of ℈j to ℥j of water, the latter in the proportion of xv.ᵒ to ℥j. A strong solution of alum, or decoction of oak bark may likewise be advantageously employed.

All applications of this class should be kept in mind, & alternated with each other, as a continuance of any one of them will soon cease to produce any effect. Connected with this treatment, attention should be paid to position, the part should be covered with dry lint, & well supported by compresses & roller; & by attending to the general plan laid down for the treatment of ulcers, the cure will be conducted to a favorable termination.

To

John Spencer Bell M. D.

Adjunct Professor of Anatomy

in the

University of Maryland.

This Inaugural Dissertation

is inscribed,

as a tribute due to his superior

acquirements in the various

Branches of

Medical Science,

and in Testimony of the Respect

and Gratitude

of

His Friend & Pupil.

An

Inaugural Dissertation,

For

The Degree of Doctor of Medicine,

on Opthalmia —

Submitted, March 20th, Day 1827.

To the examination of the Rivered —

— James Kemp, D. D. Provost. pro tempore.

And to, —

— The Trustees, and Faculty of Physic, of the

University of Maryland.

By —

James Dorsey Sutton,

of

Anne Arundle County

Maryland. —

Faculty of Physic,

Gentlemen,

As a grateful acknowledgement, of that generous attention, with which you have been pleased, to reguard me; permit me, with sentiments of the warmest regard oth, for your health, and happiness, to inscribe, the following lines. And to Doct. Davidge, my illustrious preceptor, who for many years, has so assiduously, and successfully, exerted himself, for the promotion of the Science of Physic, I will only say, may that strength of Imagination, quickness of conception, and correctness of judgment, which has characterized him, as an ornament, to his profession, continue, until he shall have dissipated error, and raised the science of Physic, far above its present Eclat, and usefulness.

Your friend & Servant

Jas. D. Sutton

Previous, to treating of Ophthalmia, I shall make, a few observations on the laws of Animal life. I shall pass over the surmises of all authors on this subject, antecedent to the time of Rush, & Brown. "There is in the animal body, a capacity to be acted on, by various Stimuli; by which all the motions of life are supported. This susceptibility, to take an action, upon the application of Stimuli, they call Excitability, further Stimuli, when applied in an exact ratio, to the excitability of the system, produce a regular, and healthy excitement, while an increase, or deminution, of the usual Stimuli, produce debility, this debility is called indirect, when caused by the former, and direct, when caused by the latter; here I think the term Stimuli, exceptionable, would it not be more — philosophical, to suppose, that no species of matter, whether alimonious, or for the gratification, of the senses, which is made use of, by the general, and particular laws of the animal system, for its private economy, in a degree necessary to keep up a regular and healthy action; do not stimulate?, and reserve the word Stimuli, to express a degree of excitement, rising above that of healthy action. Debility, either from the want of aliment, or from the application of Stimuli, is succeeded by an increase of excitability; — Excitability is always increased in a ratio to the diminution, of the general powers of life, to a certain extent, hence the judicious observation.

When the spark of life, burns feebly,
Heap not the green fuel on.

Excitability, is by no means alike, in every part, of the body, when in this accumulated state, but is in proportion to parts, previously debilitated by the action, of remote causes, hence applications, which were formerly productive, of regular and healthy action, now stimulate, and we have a degree, of excitement, beyond that of healthy action.

Discription of the Disease.

The patient first complains of itching in the eyes, succeeded by pain and redness, the latter is owing to the vessels, which in their particles healthy state, admit but serous being now distended with red blood.

When the inflamation, though it be considerable, is seated in the superficial coats, and the vessels of the eyes; the patient is seldom feverish, nor does he experience much pain, or suffer much loss of sleep; nor is the admission of light to the eye very distressing, he generally follows his usual avocations, without much inconvenience. But when the choroid coat, retina, and vessels distributed to the humours of the eye, are much affected, the patient suffers exquisite pain, from the admission of light, to the now highly sensative organ, he is distressed by a frequent and deep seated pain, shooting from the eye into the head, accompanied by soarness in the parts around the eye, and in this state of things there are febrile symptoms, with loss of sleep, restlessness, and sometimes delirium. It frequently happens that the vessels of the tunica conjunctiva, are so much enlarged as to distroy its membranous appearance, and make the cornea appear as if it were distroyed, forming the Chemosis of authers, so common in Egypt. The secretion from the Lachrymal gland, is not only increased in quantity, but is acrid and thereby keeps up the inflamation; —— When the disease is violent, and cannot be relieved, either by nature or art it generally terminates in blindness, either by a deposition of opaque matter, between the laminae of the cornea, so as to produce opacity of that coat, or in the crystaline lens, forming the disease, called Cataract, (whether this matter be pus, or lymph, throwen out by the inflamed vessels, I am not certain but think the latter, the most probable, and sometimes by the —

effusion of pus, into the chambers of the eye. when a small quantity of pus, is effused in the anterior chamber, it is called Onyx: when a large quantity, it is called Staphyloma.

The Iris, sometimes in the progress of disease, becomes attached to the capsule of the Crystalline, lens, and thereby is rendered motionless. an extravasated matter, at other times, adheres to the edge of the Iris, around the pupil, in such a manner as to form an opaque body in its place, and completely obstruct the passage of the rays of light to the retina,

I deem it unnecessary for me to say more on this part of our subject as there are Treatises of great length by Frick, Ware Noble, and many others upon this subject.

Causes of inflammations of the eyes

Having, in the commencement, considered opthalmia an inflammatory disease, we infer, that the causes which produces it, are the ordinary causes inducing inflammation in other parts of the body; but from the peculiar sensibility of that organ, and consequently its greater susceptibility of inflammation, Stimuli, when applied to it, produces greater irritation than in other parts of the system.

The causes of this disease may be divided into general and local the latter I believe most frequently produces it, The general causes are such as effect the eye through the medium of the system. It is a well known law of the Animal oeconomy that when morbid causes affect the system so as to bring on disease, that, that disease will manifest itself most forcibly, in the weakest part and the eye whether debilitated or not upon discovering its organization we are certainly authorised to conclude it is one of the most sensitive and delicate organs of the body, It would be no difficult matter, to shew that inflammation of the eyes frequently depends upon, some of the common

causes of fever; indeed there appears to be an affinity between the poison of the marsh, measles, and small Pox The most superficial observer must have seen in situations favourable for the evolution of the marsh miasma rapid and inflamed eyes. Hippocrates, long ago speaking of the Epidemicks of Thasus says, many persons were taken ill in the Spring "First of all appeared humid ophthalmias, with weepings, pain, and indigestion little concreted matter broke out with difficulty on the eyes of many persons, returned again in most, and went away at last, about Autumn" Hippocrates page 56.

In Mr. Ware's work on the diseases of the eyes we find the following. — Ophthalmia frequently comes on in a sudden and unexpected manner, without any preceding or concomitant illness, when it happens in this way, the common people call it a blast in the eyes, and indeed it seems to proceed from some peculiar impurity in the air that surrounds us, like other Epidemical diseases, it often affects a whole neighbourhood at the same time as was the case during the Summer 1778 at Newberry in Birkshire, and in several of the Camps, where it was called the Scalat disease, Ware on Ophthalmia page 17. —

In Sir Robert Tho.s Wilson's History of the British Expedition to Egypt, he says page 310. "The period no sooner arrives when Egypt for a season is relieved from the Plague, than another malady succeeds immediately, distinguished by the name of ophthalmia," Page 313. he says Ophthalmia and Dysentary are evils generated and expiring together, but he supposes Ophthalmia is produced by foreign matter coming in contact with the eyes although it is

evident from numerous respectable Authors, both
Ancient and modern that Ophthalmia is produced
by the marsh poison, yet it rarely prevails as
Ophthalmia simply at the time that the more
acute gradations of Disease from the same
do but either precede or succeed them.
Having now concluded the general, I shall now
mention a few of the local causes which produce
this disease, which are such as produce in-
flamation, when applied immediately to the eyes
such as injuries from external violence, acrid
substances coming in contact with the eye look-
ing steadily upon luminous bodies sudden
transitions, from a dark to a lighted room, and
of all causes producing Ophthalmia the matter
of Gonorhoea perhaps produces the most in-
tractible disease, and in such cases we think
the judicious use of mercury (after proper
evacuation) to be continued for one two or
even six months will be found the most success-
ful practice, and well for us if after our most
skilful exertions we should not have the mor-
tification of seing our patient left in a state
of partial, if not entire blindness. ——

Treatment. ——

Our prescriptions in this complaint, as in every
other must be regulated, by the state of the Sys-
tem, and our remidial measures prescribed
according to the urgency of the symtoms.
If the patient labours under much fever and
complains of pain about the head and temples
and the vessels of the eyes be much distended —

with red blood, — bleeding in as large quantities as his strength will admit of should be practiced, in the use of inestimably remedy we should be guided by the pulse and the violence of the disease, we should keep down the action of the heat to prevent as much as posible mischief being done to debilitated and highly inflamed vessels and when the patient has been so much reduced as not to admit general blood letting the use of Leaches and cupping, which are advised by authors to be applied to the temples another mode of taking blood immediately from the inflamed vessels, termed scarification of the eye ball and lids, some have objected to this practice, alledging that the irritation offered the organ, more than counterballanced, the benefit derived from the operation, but I think the experience of surgery has settled beyond dispute the utility of the operation when performed under proper circumstances the operation however should be performed with care and steadiness, and we should always cut a little from the inner towards the outward angle of the eye, lest we run some risk of dividing the duct leading to the nose. — The next indication is to attend to the state of the aliamentary canals our patient should be freely evacuated by saline cathartics and afterwards his bowels kept in a proper state of laxity which may be done after the state of excitement is considerably diminished by nitrate of Potash and Tartar Emetic. — The diet of the patient is also an object of our attention, it should be purely vegetable void of spices and fermented liquors, taken at short intervals

An Inaugural Dissertation

on Suspiration

Submitted to the Right Reverend

James Kemp D. D. Provost

to the

Trustees and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by James Aman

March 19th 1827

A Medical Dissertation
on
Suppuration

Suppuration is the formation of purulent matter, from the surfaces of the blood-vessels; and the fluid so produced is called pus.

Purulent matter is formed from the exhalent vessels of natural surfaces, when inflamed or in cavities formed in the body by ulceration or absorbent process, as in abscesses or from granulating surfaces.

When matter is formed upon the natural surfaces of the body, which are connected with organs of vital importance, much irritation and disturbance attend it; but when it is produced upon wounded surfaces not important to life, or upon parts of little vital importance, then it is often formed without an irritating fever preceding it.

Rigors succeeded by heat, attended with a quick and hard pulse, and with other-

other symptoms of constitutional irritation, usually precede the formation of matter in acute abscess.

Whilst the rigor occurs, the blood is collected in the large vessels in the vicinity of the heart and in the heart itself. Torpor of the nervous system, coldness of the surface, and diminution of the powers of volition occur and irregular action of the ~~heart~~ muscles are produced. But the congestion of blood in the heart soon excites it to additional action and the blood is propelled from it through the vessels with unnatural force, the heat of the body is then restored, and Nature directs the blood to the part in which it is particularly required, and thus does the constitution assist in the production of suppuration. When excessive exertions lead to relaxation and debility, and the vessels pour out from their extremities upon the surface of the body the watery parts of the blood in the form of perspiration

perspiration; but when pus is easily produced, as upon some mucous surfaces, and the surfaces of wounds, such constitutional efforts are not observed.

The local symtoms which attend this process are, that the part becomes more painful, that the kind of pain is changed from an equal and dull sensation to an acute and pulsating pain, accompanied by throbbing of the vessels, so that the patient could imagine his pulse in the inflamed part. The swelling rises at one part, so as to form a portion of a small circle or more surgically, pointed; the redness is increased, becoming more of the arterial kind, so that there is a blush upon the surface. A fluctuation may be perceived by feeling the part with two fingers at a slight distance from each other. The cuticle separates, a desiccation destroying its attachment, and the cutis and cellular membrane becomes thin, so that the matter gradually app-

Headache

approaches the surface. Sometimes the internal surface of the skin ulcerates in a number of spots to meet that from within, but generally the process is entirely from within. At length an opening of an irregular kind, is produced, and the matter gradually escapes as the opening enlarges.

Pus is not as it was formerly supposed to be, a fluid formed by the dissolution of solids, but is produced directly from the blood, changed somewhat in its nature from the action of the blood-vessels. That it is not the product of the solids of the parts upon which it is produced, is seen in the application of blisters to a surface. For instance, let a blister be applied on the chest, and the cuticle raised, the serum which is produced, and the fibrin which is poured out, be removed in a few hours; inflammation arise upon that surface, and pus is formed

on it from the open extremities of the vessels.

On all serous surfaces, as the dura, pericardium, and peritoneum, there is no loss of substance in the largest production of matter; but on the contrary, sometimes great addition is made to these membranes; though if there be a loss in any stage, it is a genuine loss.

Pus seems to possess no chemical property by which it acts upon urea, much less can we conceive its power of dissolving living solids. Bones will remain for months and even years in pus without solution, and tendons continue in it for several weeks and at last separate by sloughing. Experiments have even been made on muscular fibre but no diminution of its weight was observed until the process of putrefaction commenced, it follows then as milk, bile, saliva and tears, are produced from the blood by the action of the blood vessels, so is pus but an altered

altered state of the blood, produced by the extremities of the secreting vessels upon the natural surfaces, or upon the granulations of an ulcer.

Inflamation preceding the formation of matter in healthy parts is active, in the debilitated and scrofulous it is of a very slight, and the pus which is produced is generally less perfect. Sometimes even there is such a change of action that the products entirely differ, being serous and curd like, or even chalky, in scrofulous abscesses.

A cyst is formed in an abscess to surround and confine the matter, but it is to be understood, that this cyst is not a cell in which the matter is contained, but the cellular tissue has in its interstices adhesive matter effused, which prevents the pus from passing into its cells in a healthy abscess.

Pus is a yellow fluid; if poured into water it sinks in it, and is consequently of greater specific gravity than water; on the other hand, mucous generally swims in water. It appears to contain the constituents parts of the blood; examined under the microscope, it posses globules, which differ from those of the blood in colour, but greatly resemble them in their general appearance. Pus also contains abundance of fibrin: if water be poured upon pus until the solid part, which remains at the bottom of the vessel, be entirely deprived of its serum and globules, numerous portions of fibrin are found remaining; although not exactly the same size, yet they have a great uniformity of appearance. Thus pus is composed of serum, fibrin, and globules; and it would appear very probable that it contains all the constituents of blood, slightly changed in their character by inflammation

It does not appear to be prone to a putrefactive state; and we therefore find, in its healthy state it has not a putrefactive smell; but changes in the constitution will sometimes render it excessively putrid.

There are certain states of the system which change its character so much as to render it so extremely irritating to the surrounding parts as to excoriate.

That pus is formed by the action of vessels is well evinced, by the changes which it undergoes in specific Inflamations; for which not only pus is produced, but matter possessing poisonious qualities.

The fluid of small pox will occasion by its insinuation in the skin, poisonous matter, capable of exciting fever and covering the body with pustules, all containing matter similar to that which originally produced the inflamation at the innoculated part.

It is obvious, that a process like that of suppuration, and which is so frequent an effect of inflamation, must be instituted for beneficial purposes, and the uses which it serves are as follows:

Upon the surface of wounds, the principal advantage arising from its presence, is, that it keeps the granulations moist, and thus enables the vessels to elongate, and to form additions to the granulations, until the cavity is filled by them, without the production of this fluid, the surface of wounds could never heal, because the granulations would be destroyed.

Another is observed in abscesses, in which it is the means of exciting absorption, and thus of producing an opening, by which the cause of irritation may be removed, and it afterwards covers the rising granulations until they

-they reach the surface of the skin.

The coagulable matter, which the pus contains, will lead to the heal-ing of a sore without any adventitious aid. Thus we see, in animals of the lower order, sores encrusted with the solid matter of pus left by evaporation: under this is fluid pus contained: and when the incrustation is removed, healthy granulations appear. In sores obstinately resisting different applicat-ions, when after becoming encrusted have healed without any further trouble.

W. Irving.

An Inaugural Dissertation

On Digitalis Purpurea,

Submitted to the examination

Of the Right Rev. James Kemp, Provost

And the Medical Faculty of the ——

University of Maryland for the

Degree of M. D.

By Benjamin Lanier

April the 2d. 1827.

18888

Digitalis Purpurea. 1

This article takes its name from its leaves having a likeness to a finger and being of a purple colour, It is a biennial plant Growing abundantly in the mountainous forest of Switzerland. And is cultivated with both for the beauty of its flowers and Remediate purposes— When properly dried it possessed a faint narcotic odour and a bitter nauseous taste. It contains extractive matter and a green Resin in both of — which its Narcotic properties Reside, It is said Also to contain ammonia, And some other salts. This Medicine was brought into use by Dr Withering in the year 1995, he used it in Dropsy which soon Occasioned it to becomes a popular Remedy in that disease. When taken in an over dose this — Medicine produces heaviness of the joints indistinctness of vision, Syncope, nausea, trembling, Vertigo, pain in the forehead and bottom of the orbits, drowsiness a slow and tremulous pulse, Vomiting, and occasionly diarrhoea with pain of the bowels

2 Digitalis Purpurea

~~cold sweats, coma, convulsions and apoplectic~~ death. It has produced an incontinent discharg of urine sma

cold sweats, coma, convulsions and apoplectic death
It has produced an incontinent discharge of Urine
Small doses given frequently produces a distressing
nausea, attended with anxiety and depression of
spirits, weakness, vertigo, false vision, great diminution
of the frequency and force of the pulse, reducing
it sometimes as low as forty Strokes to the minute
with langour of body and mind, It sometimes
renders the pulse irregular and convulsive without
diminishing its fullness, in all cases where the
patient has taken an over dose and the comman
Symptoms supervene, we are called upon to give
immediate relief and the treatment must
consist of active Stimulants, with a blister
over the Stomach and Synapisms to the extremities
Its narcotic effects are by no means transient
but on the contrary they are apt to continue
long and even occasionally appear a second time
we should be cautious and bare in mind, that
when this medicine is given in proper doses

that it does not always act immediatly
but on the contrary it is several days ~~before~~
sometimes before it acts and then all the
Symptoms come on And for this reason it is
essentially necessary that the patient —
should be visited very frequently. The destroying
symptoms might supervene and destroy the
patients life immediatly. It is also said that
whilst the medicine is acting that posture
makes a great variation in the pulse a Gentleman
observes that after he had got his system under
the influence of this article when he was in
in a horizontal position his pulse beat forty
stokes to the minute, when he stood erect
his pulse beat more than a hundred to the
minute. Who Dr Withering has exalted this
medicine above the earth and placed it (as it were)
on same elevated station in the celestial
habitations, yet from a fair investigation
of its medicinal virtues, it has been avowedly

proved that he was led astray by blind enthusiasm
which too frequently overshadows our minds
Dr Farrier states whilst one ~~man~~ Physician
declares that it is diuretic another say that it has
no diuretic properties, It is stimulant says
a third, It is sedative cries another, whilst
the fifth with equal baldness says that it
has no such properties at all, Dr Chapman
says that it is a narcotic sedative Dr Eberle
says that it acts immediatly as a sedative
for it is certain that its stimulant effects if
it has any are very transcat and feeble.
Whilst Professor Barker with more propriety
says that it acts as stimulant in the first
instance and then immediatly as a sedative
which is the most plausible inference
because you cannot give it where there is much
excitement for fear of congestion, nor where
there is much debility for fear that its sedative
influence might produce immediate death —

Digitalis Purpurea

Digitalis should not be given where there is much excitement nor where there is much debility It acts in the first instance as a stimulant and secondarily as a narcotic sedative The Foxglove is said by Dr Chapman to contribute to the cure of disease as far as the removal of water is necessary for the same Digitalis has been highly celebrated in the cure of inflamatary diseases and said to almost supersede the lancet but those fanciful and enthusiastic Practitioners have built their Knowledge on a baseless foundation and will soon be amidst the quicksands of folly where the lancet can be used the Digitalis never should but now the time has came when digitalis is put in its proper station by scientific men who are not led astray by blind enthusiastic prejudice If we use the medicine where the lancet can be use expose the life of our patient without any necessity for it The Digitalis has done good or displayed its

Digitalis Purpurea

Its beneficial qualities in Pulmonary Consumption
Epilepsy, Pertussis and many other diseases
There is a particular state of the system
to be observed in the administration of this
medicine If you give it where there is too
much excitment death will be the result
And if you give it where there is much
macriation the result will be the same
The Fox Glove is Diuretic narcotic and expec
torant This is an incontrovertible "fact" narrated
from the experience of many scientific men
whose labors have been crowned with the laurels
of merit. There are several preparations of this
Article, the powdered leaves is the best, If any
person were to swallow an over dose this article
It would be proper to give an emetic provided
you could do so before the medicine had left the
stomach or acted on the system, but if the usual
symptoms had came on it would be then
necessary to resort to the remedies before mentioned

Digitalis Purpurea

The leaves of this article have been long used in the cure of Scrofulous ulcers the leaves of this plant should be gathered when it begins to blossom and dried by the fire and carefully preserved in powder, the dose of this medicine is half a grain to be increased to two or three grains twice day this is the powdered leaves, It is also given in the form of a saturated tincture the dose of this from one to five drops so soon as the pulse begins to be diminished the dose should be increased with a great deal more precaution and whenever (nausea) is induced it should be diminished or suspended for a short time this medicine not only acts a diuretic in Dropsy but also promotes absorption, it has frequently succeeded where other diuretics had failed, It seldom succeeds in men of great natural Strength of tense fiber, of warm skin of florid complexion or in those with a thight and cordy pulse, If the belly in ascites be tense hard and circumscribed or the limbs

in anasarca, solid and resisting we have but little to hope, on the contrary, if the pulse be intermittent the countenance pale, the lips livid, the skin cold the swollen belly soft and fluctuating the anasarcous limbs readily pitting under the finger when pressed we may then expect the diuretic effects, to follow in a kindly manner. If a liquid be prefered a dram of the dried leaves is to be infused for four hours in a pint of boiling water adding to the strained liquor ounce of Spirituous water one ounce of this infusion twice a day is the medium dose it is to be continued in these doses until it acts upon the Kidneys Stomach ~~or~~ pulse or bowels, the dose thus should not repeated too frequently, we should allways administer this medicine in very small doses when we first commence and increase the dose until same effect is made on the Stomach Kidneys or Vascular system, then it may be suspended

Finis

An

Inaugural Essay

On

Cynanche Trachialis

Submitted To

The Examination

Of The

Rev. Bishop Kemp, Provost

The

Trustees and Medical Faculty

Of The

University Of Maryland

On the 28th of March 1827

For The Degree Of

Doct. Of Medicine. By Albert Gleaton

Loudoun County Virginia

By Albert Heaton, Excelsia,

Loudoun County

Virginia

March 22nd 1827.

Cynanche Trachialis or Croup

A disease located by Nosologists exclusively to the Mucus Membrane of the Trachia; But I will endeavour to show that this, (tho' it is sometimes confined to the Trachia) is not founded in Correct Pathological views of the subject as is fully demonstrated by the morbid Phenomena exhibited on Dissection; an instance cited by Dr Potter in his Lectures on this subject of the dissection of a Child who died of this Disease clearly evinces the nature of its character every part of the Trachia and every the most minute ramifications of the Bronchia, & air vesicles of the Lungs exhibited traces of Inflammation, it is translated from one part to another, not only is the Mucus Membrane of the Trachia alone affected, therefore

but every part of the mucus membrane to every termination of the Branchia & air vesicles of the Lungs, the Lungs themselves together with the Mucus Muscles about the Throat and sometimes from an Extension of Inflammation the Brain becomes affected with the same Morbid action, But this Extension and diffusion of Inflammation does not uniformly take place except in the aggravated cases of the disease, in milder examples or the contrary it is confined to the Trachia or at least it does not extend far beyond the limits of mucus membrane of the Trachia; But in a majority of cases it does and by an Extension of Inflammation we not unfrequently find complicated with it (if efficient depletion has not been employed) Bronchitis, Pneumony, Pleurisy &c

these Phenomena of the disease are clearly conscious of its Character, and palpopably demonstrates its legitimate Pathology, showing that it cannot be confined and restricted within the narrow Pale of Systematic Nosology the Doctrine of which in relation to this Disease in the development of its Phenomena vanishes like the baseless fabric of a vision and leaves not wrate behind. Croup is characterized by Fever it is not uniformly preceded by Chile when it is it generally assumes a very aggravated Character associated with symptoms, evincing of the most dangerous Inflammatory Nature, the Exacerbations of Fever are generally at night and which go off in Sweats at the approach of Morning, and if no remedy is in-
stituted

interposed immediately such as an Eruption (I have here now allusion particularly to the ~~I have here now~~ irruption of the disease) it will soon run on into an Inflammatory form, a sonorous inspiration comes on of a very peculiar character which is the more distinctive feature of the disease difficult respiration, much aggravated in the exacerbations, the Pulse is frequent and hard, great thirst and restlessness are associated with the symptoms of this disease. The natural functions are not always impaired in a corresponding degree, in a majority of cases Children will take food during the rapid progress of the disease, and may not unfrequently

be found running about while the Disease is "hastening on with a threatening aspect to its destruction and if allowed to proceed, unmolested by the resources of remedial agency, all the symptoms become aggravated in the most alarming degree, the breathing becomes more more difficult, Cough more harassing, Expectoration difficult and unproductive, until finally Death seizes the unfortunate sufferer and puts an end to the existence, either in the form of suffocation or by extension of Inflammation to the Brain.

They do not therefore die as has been contended in consequence of a spasm of the muscles of the Epiglottis and thereby impeding the admission of

Atmospheric air into the Lungs, but on the contrary that it is owing to the vocal Chords or Ligaments of the Larynx becoming thickened in Consequence of Inflamation, which taking on a Secretory process the result of which the Secretory Matter, Fibrine together with the thickening of the Ligaments of the Larynx thereby stopping up the passage of Air into the Lungs is I think the most probable way in which death takes place in this Disease, or by an Extension of Inflamation to the Brain

This Disease is more prevalent from the first to the fifth year and occasionally we have it in advanced periods of life as the Experience records of

* Children after having it once an great promness is left in the system to have it renewed on the slightest occasion, from this promness to return, therefore is evidence at once of its non Contagious nature for it is the law of Contagion to affect the system but once consequently this Denom is not Contagious

fully
unfolded, therefore it would seem that it is not restricted to any age exclusively, but Children in a great majority of instances are more prone to take on this Disease than at any other stage of life* more particularly so when hereditarily predisposed, this hereditary predisposition consists in an increased or preternatural sensibility of the Trachea from imperfect organization which is contracted in the very act of generation Habits connected with such predisposition ultimately die of Phthisis; more liable indeed when associated with scrofulous disposition, but this is not necessarily connected with it as has been contended, yet more than it does sometimes occur early after a

Scrofulous Predisposition and when it does occur the subject of these associated Predispositions invariably dies of Phthisis; Besides this Hereditary promptness to croup, and which may be called Idiopathic another suggests itself which may be called Symptomatic which follows Small Pox, Measles, and other Exanthemata,

Having now premised these remarks on the general Character & Peculiar Phenomena of the Disease its Pathology (which I consider as strictly Inflammatory), and the Predispositions, I shall now advert to the Association of External Circumstances which favor the production of the Disease, In uniformly Cold and Warm Atmospheres this Disease

rarely or never occurs, the most fertile source of Croup is Cold associated with ~~[illegible]~~ alternatives of temperature, with a Damp Atmosphere. It commences in our County in August and September when the mornings and evening become cold, sudden transitions from a Cold to a warm Atmosphere coming from Cold Atmosphere to a warm fire, along Water Courses it is my prevalent Fallback County Maryland furnishes a striking illustration of the fact. Dr Potter says while Lecturing on this subject I recollect says he on one occasion from the sudden melting of a great fall of snow I had Thirteen Cases in 48 hours owing to the Change of temperature and the

Humid state of the Atmosphere; the ex=
=citability is increased or accumulated from the
loss of temperature and the sudden transition
the excitement is redundancy increased and if the
Trachea be predisposed from what ever cause
its Phenomena of excitement is exhibited in the form of Croup
the Pathology and Symptoms of which have already
been described, I shall now merely observe
here that this disease is not confined to the
Human Species alone; but it affects Horses in
the form of what is called the Distemper; Dogs also
have it, and it is moreover a symptom of Canine
madness, the morbid phenomena on dissection have
proved it; Cats also have this disease and

is what is called the Influenza of Cats. After making this digression, I shall now proceed to the treatment of the Disease which must be regulated according to the modified state of the Disease and when united with strict & frequent [illegible] nothing to fear for our Patient of our [illegible] for if our remedies are applied effectually in [illegible] arrest the progress of the Disease, The Treatment of Croup has been divided into Two stages the first being that of Inflammatory action the second is distinguished by the formation of the Preternatural Membrane which is merely the result of a secretion from the Arteries under high Inflammatory action, and which the Physician ought to prevent, in his treatment in the first — by the Lancet stage by Emetics

As more systematic arrangement is [illegible] by [illegible] other

I shall consider myself as having done justice to the subject

in adopting his arrangement viz 1st Emetics, 2nd Bloodletting

3rd Calomel & Cor. Sublimate, 4th Warm Bath, Leeches & Blisters

5th Tracheotomy,

With a view to the treatment of remedies by the 1st Class

for Example when the Disease has just come on

and not involved the general system in Inflammatory

action, that is in the inception of the Disease

Emetics may be used with radical advantage

and where the Disease is local and unattended with

inflammatory action, Tart. Antimo, and Calomel united

is not surpassed by any other medicine in the

Materia Medica; [illegible] of these is much [illegible] [illegible]

higher degree of inflammatory action, Bloodletting must be depended on solely, and to the extent of producing copious evacuations; Emetics and Calomel in this state should be abandoned as highly injurious they would tend to aggravate and increase the irritability instead of acting as Medicines they are only suited to the sub acute state of the disease, either in the inception or, in its subdued form of the spirit is the insusceptibility to the action of Medicines in this disease, that we are obliged to use them in large doses, should Calomel fail in producing its proper effects, we must resort to the Cor. Sub. Mercury which has been known to succeed when both Calomel & Antimony had failed;

Warm Bath, Leeches and Blisters should alone be restricted to the 2nd stage of the disease after the subduction of Inflammatory action and where the is [illegible] debility and the disease is merely local the united action of these remedies or the use one of these singly uniformly eradicate every remnant of the disease it is exclusively to this state alone that they legitimately belong and claim our attention, it is in this state therefore that they act as medicines, they act by giving Tone to the weakened vessels and causing them to contract - 5thly Tracheotomy which is sometimes employed in that stage of the disease when the Trachea is so obstructed as to prevent the

accompanied by Atmospheric air owing to the copious

secretion, but this Operation I do not consider as

by any means efficient it is rather calculated to

benefit the Patient much. it is merely palliative

and tends only to prolong life but at that time

little can be done for this operation were it

indicated; while the Canula is in the Trachia we

cannot give an Emetic nor it were so much

required - so therefore we must infer that that

it is merely a Palliative resource; and when

we employ it, let us be assured, that it is our

last, but feeble resort in a forlorn case.

An
Inaugeral

Dissertation on Mercury

Submitted to the Medical Faculty

of the University of Maryland

For the degree of M. D.

By Benn Dowler

City of Baltimore

1827

In conformity to the requirements of the University I have attempted to write a medical thesis, under circumstances so peculiar, as not to allow me more than one day, for the accomplishment of this task. Having no new theory to advance, I must satisfy myself by making a few practical observations on the most effluent agent of the Materia Medica. Although the most enlightened Practitioners are fully convinced that in the treatment of many diseases this remedy is the only one on which our sinking can hope fasten∈; yet who can contemplate without a sigh the rapid approximation, of this medicine, in popular opinion, to the opprobria Medicorum: insomuch that some Practitioners denounce it altogether in their Practice: a course they no doubt think necessary to their popularity. Owing to frequent & fatal salivations, the

people in some sections of our country, have asso-
ted with mercury ideas as terrific as those of the
itself. These fears are not without some founda
I could speak the strong language of facts wh
have fallen under my own observation. I could
tion the case of a lady who ~~for~~ was slightly affe
with Rheumatism; her Physician gave her Calom
she has never walked an inch since: a year since
other Physician gave to a child (living almost nex
to mine ~~myself~~) one or two doses of the same medicine
anthelmentic; ~~the destruction of worms~~ in a few days this fine gir
from the mercurial disease alone. I could relate a numbe
other instances of the same results, following the
hibition of this metal.

Perhaps future experience may teach
that profuse Ptyalism is unnecessary in any disea
is a desideratum "devoutly to be wished", as there appea
certain means of ~~effectually~~ controuling the morbid effects o
cury. The Records of medicine, seem however, to fu

sufficient proof, of the utility, of the constitutional influence of mercury, in certain diseases; fortunately, however, those diseases in which the specific action of mercury takes place with the greatest facility, seldom require the exhibition of this remedy for their cure. Thus I gave a gentleman 3 grs of Calom. with a suitable dose of Calcd. Magn. which operated in due time: within 48 hours, a slight salivation supervened. Now this same person was afterwards seized with the bilious fever; was treated with energy—recovered & relapsed repeatedly; untill after many weeks three grs. of Calom. with 2 grs. of Opium, were given once every three hours, for three days when a mild mercurial action took place; mercurial cathartics completed the cure, without a decided Ptyalism taking place; in this case the skin was dry & hot; the pulse feeble; subsul. tendn. was present: I have been called to see considerable number of such cases where remedial measures had been adopted; others

had been trusted to the Vis Medicatrix: but
had failed: in some instances the Physician h
abandoned the patient to his fate; these patie
could not bear purgatives; a few drops of Ol. R
or any other purgative, even calom would run through the
els in a short time, producing a serous evacu
yet all these ~~case~~ patients were cured by Calo
Opium*sometimes requiring ~~in~~ exceedingly large doses: th
combination produced a profuse secretion of ve
green, sometimes black, often inodourous matter,
upon being evacuated, per anum brought speedy relief: i
no case could stimulants or bark be given wit
ty: I have reason to believe, that all other m
of treating this low Typhoid ~~condition~~ state of
as it occured, in a number of instances last Autumn & winter in our to
county, proved fatal. In no case did the m
become very sore; ~~yet~~ In one of these cases, the p
was so much prostrated, that the pulse was only occ
*always omit in ordinary bilious fever of the 3 actu

ably perceptible; often intermitting for an incred-
ible length of time. the bowels were caused to act
by the smallest doses of purgatives; but nothing of an
unhealthy appearance was discharged. Calomel & Opi-
ium were given for several days. the system was
stimulated, strenght began to return; the pulse
became invigorated & regular. the bowles con-
-fined; precisely 100 grs of calomel was given at
one dose; the next day cathartics of Scammony &
Jalap were administered; these medicines opera-
-ted mildly, without nausea & without producing
debility or salivation; gallons of thick inodor-
ous evacuations came from the bowels for
several days; the patient rapidly recovered. I have
several times given large doses of calomel in cases
where the disease seemed to be more strongly indicated
than in the above case; given large doses with
a view to experiment satisfy myself as to its ef-
-fects

when given in large doses; and although
well not venture to recommend it in larger do
than those reccommended by the professors
our medical College; yet still I must say th
far as I have observed 60 grs of calomel i
-tain states of disease, constitute a mild, sl
safe purgative. I have several times ~~repeatedly~~ given exa
this quantity where all other purgatives fail
then the system has become susceptible to the influen
other cathartics, in ordinary doses, & bilious evacuatio
taken place —— In highly inflamitory bilious fev
-ivation is a matter of difficulty; and is I su
often injurious to the patient: but even in this form
ver calomel in combination with other purgatives g
daily, is generally indispensible. After the failu
-pletion, by both the lancet & cathartics I have
a large dose of calomel, by its peculiar impre
bring relief to the head, stomach, bowels & bac

subsequently, the secretions of the liver & skin have taken place, equalizing the circulation & subduing the fever.

After thus reducing the inflamatory actions, I found bilious fevers to yield in all cases to the mild specific influence of this remedy, on the constitution: I have used it largely in Hepatitis, in the chronic subacute & even in the acute form: in this latter form no other medicine can be retained in the stomach some instances. In Dysentery & cholera it proved the best remedy: in this latter disease, after almost every known remedy had been tried, it triumphed in my own case: I took 40 grs at once: the vomiting cramps &c immediately abated: opium in all its forms & in great quantities did no good: the vomiting had continued several days, without much intermission: the paroxysms being almost incessant: but the calomel succeeded in

rescuing me from the jaws of death.*

Had I time, I could say much of the inva-
-ble effects of this medicine in Dysentery in Cyno
Trachealis, Cholera Infantum & Marasmus of chil
in very small doses it does wonders. In scarle
Anginosa & Simplex; also in Measles it is a
Purgative, according to my experience. I tri
this medicine, in two cases of convulsions, with
plete success; both these patients were children
had been under the care of another Physician
a month or two, without any relief: I gave co
for a month before the child's mouth becam

In an obstinate case of constipation wh
continued for several weeks, notwithstanding
other means was unavailing, this was succe
after amazing quantities had been taken
the mouth was but little sore.

* I do not suppose that calom is always to be prefered to op
in the treatment of Cholera; it sometimes is preferable & indu

A case of Phthisis, caused by catarrh, was treated with great care & perseverance for the greatest part of a year: death seemed inevitable nearly every day of hope was gone; the purulent expectoration was profuse; the cough frequent; the system prostrated; hectic completely formed; night sweats very abundant &c. three grains of Calow. with half this quantity of Opium was given several times a day for six weeks: the patient recovered with great rapidity & became very healthy. If this above case was not a case of consumption then all our best books on the diagnosis of this disease contain a tissue of fallicies.

Being ordered by the Magistrates of Harrison Co. to attend two Maniacs in the Jail. I cured them completely by mercury: one case had been of many months duration; and both had been under medical treatment before the mercury was given but without relief.

Dr M'Dowell Should I after my return ha
have an opportunity of sending a thesis prior to the
of Commencement I will write one which will b
worthy of my Alma Mater.

Yours profoundly

Sunday night Feb 27 Bennett

An Inaugural Dissertation

on

Ascites

Submitted to the examination of the

Rev. James Kemp D.D. Provost

To the Faculty of Physic

and

Trustees of the University of Maryland

For the degree of Doc. of Medicine

by

Samuel Harper

Centre Ville Queen Ann's Cty.

April 1827

Ascites is the disease which I have chosen for an Inaugural Dissertation. Under this Title is comprehended all morbid collections of aqueous humours, within the abdominal region, and this species of Dropsy is of more frequent occurrence than any other. All ages, sexes, and conditions, are the subjects of this disease, and so frequently does it make its frightful appearance, and so numerous are its victims, that every reflecting and feeling Physician is constrained to deplore the deficiency of the healing art. We may however congratulate our Profession on the progressive improvement of the Pathology and Treatment of this disease. Under the fostering care of our celebrated country men Professors Rush, Potter &c. This disease which was but a few years ago treated almost entirely as an Atonic disease, is now considered and treated as a disease

of increased morbid action and numerous cases have been successfully treated according to this improved Theory. Without further exordium I shall proceed to treat of its Character, Symtoms, Diagnosis, Causes, Prognosis, and lastly of its cure in the order here expressed ——

Character.

Ascites, as above observed comprehends all aqueous collections inside of the Cutis Vera in the abdominal region. Authors describe several varieties viz. when the aqueous humour is confined within the Peritoneal Sac, when encysted, as in Ovarial Dropsy and as some say between the abdominal muscles and the Peritoneum ——

Symtoms.

This disease may be known with the greatest facility by an enlargement of the abdominal region, with fluctuation, great thirst, a sense of weight within the cavity of the abdomen, difficult respiration, scanty and high coloured urine, depositing a lateritious sediment, dry skin,

frequently a tumefaction of the face and lower extremities, costiveness, sluggishness, dry cough, pain in the epigastric region and a general Hydropic Diathesis. These Symptoms according to Dr Rush are generally preceded by previous predisposing debility and are frequently attended with a hard, full, quick and frequent pulse; if all these states of the pulse are not found in the same patient at one time, yet there are generally enough with other symptoms to be hereafter mentioned to support the opinion, that this is frequently a disease of too much action; a white tongue is frequently present, the blood when drawn has a buffy coat, and we see this disease often connected with other diseases, which are admitted to be inflammatory, such as Hepatitis, Splenitis, Pneumonia, Gout, & Rheumatism &c.

The above view of Ascites will be further supported by the remedies hereafter to be detailed, which in the hands of every modern Physician have been occasionally successfull, but which could never have been so, if Ascites

nas; as formerly believed always a disease of weak habit
action —

Diagnosis.

There are several diseases to which Ascites has considerable resemblance, from which it is necessary to distinguish it. It may be known from Tympanites from the latter's being attended with an unyielding sense of tightness, and a sounding noise like unto a drum head, flatulent discharges from both ends of the alimentary canal, and a feeling of comparative lightness: Ascites is distinguished from Pregnancy by all the symptoms of the latter State, such as, morning sickness, giddiness, longings, quickning an enlargement of the breasts and nipples, cessation of the Catemenia, absence of the shakness of breath, and other Hydropic symptoms. In Pregnancy the patient is frequently lively, active and healthy, which is never the case in Ascites. It is distinguishable from Physconia, Hepatitis &c, by the partial unyielding hardness, the absence of fluctuation

and other Symptoms of Ascites heretofore mentioned. In encysted Dropsy the tumefaction is circumscribed, partial, & irregular, fluctuation is either absent, or indistinct, the vigour of the System is less impaired, and the Hydropic appearance is less apparent, but it is of little importance, as the treatment is pretty much the same in the several varieties of Ascites —

Causes —

Ascites is frequently the consequence of previous diseases, such as obstruction of some of the abdominal viscera, Jaundice, Diarrhœa, Dysentery, Phthisis Pulmonalis, Asthma, Gout, Bilious, Typhus and other Epidemic Fevers, also the Exanthemata, Intemperance in eating, and drinking, all excessive and unprofessed evacuants, &c. There are many other causes enumerated by Authors, such as Aneurisms, Palpitations, Ossification of the Heart and Arteries, ruptures of the Lymphatics or Thoracic Duct, a diseased State of the Orifices of absorbents and

what ever has a tendency to impair the general health.

Prognosis.

It seldom happens that the Practitioner could be justifiable in giving a favourable Prognosis in this disease, as it most generally terminates fatally. In predicting the termination of Ascites, We should take into consideration the age, habits, causes, and continuance of the disease. If it be caused by a diseased state of the abdominal Viscera, if we suspect ossification of the heart or Arteries, a rupture of the Thoracic Duct, Aneurisms, or Phthisis, we are to suspect a fatal termination. If the thirst be excessive, if an Erysipelas, a Hemorhage or any other violent affection accompany the disease; or if after having used the most approved medicines, we find no amendment, it will be likely to baffle all our exertions; but if the Patient be young, the disease recent, and after the use of remedies, the thirst abates, perspiration

comes on, and a plentiful discharge of urine, with other symptoms of returning health, then we may give the Patient and his friends some encouragement

Cure -

This though difficult and generally impossible is always to be attempted, and our efforts will sometimes be crowned with success, and even when we fail to effect a cure we may prolong life or give relief to our patient.

In undertaking the cure of Ascites it is of the utmost importance to ascertain the state of the system, for what would be beneficial in one state, would be injurious or ineffectual in another.

It is important to ascertain if possible the remote causes, and if they still remain to remove them if practicable, and in doing this we shall find it necessary to prescribe for the state of the system, guided and regulated by the pulse and other symptoms hereto fore enumerated.

In treating of the cure of Ascites, I would first propose the remedies proper for that State of the disease attended with increased morbid action or Tonic Ascites. The first remedy is Venesection, that this important and indispensable in numerous cases of Ascites is indubitable, this I infer not only from many of the remote causes and cases of success recorded; but from the strength of testimony in its favour, amongst those who advocate Venesection in dropsy. I find Hippocrates, Hoffman, Home Monro, Rush and Potter, the last two have sufficiently established its importance to satisfy the most timid; indeed bleeding has become a common remedy for this disease in the United States. Next to Venesection Purging is I think a most indespensable remedy. It has been used in all ages and countries, and notwithstanding its indiscriminate use in Tonic and Atonic Dropsy, yet it maintains its importance in the list of Hydropic remedies, it however requires to be used in those cases

of too much action. The purgatives mostly in use, are Calomel, Jalap, Scammony, Gamboge, and the neutral salts, and particularly Super Tart Potash, which may be used alone; or in combination with other articles, in a word the whole class of Hydragogue Cathartics. These however are proper only when used as purgatives, in Ascites of too much action; but several of the above remedies may be used in small doses in cases of weak morbid action.

Emetics are recommended by a number of Writers as in Dropsy, and are probably worthy of trial; among the most useful are Salt Petre, Salt Zinc &c these act probably by reducing febrile action. Nitrate of Potash and Cream of Tartar are highly recommended by many writers, and are I believe generally approved of and used by Medical Practitioners. There are other remedies proposed in Anasarca Dropsy, which I will only mention viz Fear. There are many cases on record where fear appears

to have affected a speedy cure, by producing copious discharges by the kidneys — Fasting &c &c. after having reduced the Heart and arteries we may use Diuretics with advantage. This class of medicines has been used in Dropsy from the earliest ages, and still continues to be important. This class comprises a great variety of articles, each having its advocate. Squills appear to occupy a conspicuous place in the list of Diuretics and are I believe a favourite in the University of Maryland. They may be given either alone or in combination with other articles, particularly Calomel in small doses. Cream of Tartar is highly recommended by some who are eminent in their Profession; it may be used as a Cathartic or Diuretic. Nitrate of Potash is used in both States of the System; but is considered doubtful in cases of weak morbid action. Dandelion is a remedy of wonderful powers in Dropsy and highly extolled by many

eminent Physicians. Cantharides have been recommended in Dropsies attended with a weak and languid circulation.

The next remedy which I shall mention is Digitalis a Medicine about which Authors differ very much. Some Practitioners prescribing it in Dropsy of great morbid action, while others of equal eminence give it in the opposite State. I am aware that some of the most eminent men of the Profession do not advocate the use of this medicine; (among whom the immortal Rush stands conspicuous) he when speaking of this article says "that when a medicine has once been celebrated for the cure of diseases, and subsequently falls into disuse; this is a strong argument against its efficacy. This in general may be true, but cannot be received as conclusive evidence: for if so, Mercury, Antimony, Lead, Bark and many other valuable medicines would not now be in such general use. I have had

but little experience with this remedy; but I am inclined to think it worthy of a trial, particularly in cases where the Arterial action is feeble. There are many cases recorded by different Practitioners of its having proved effectual, And my Preceptor informs me, that he has succeeded in a number of cases and in two or three at the same time, using Calomel and Rubigo ferri after tapping. The oil of Juniper has been highly recommended as a Diuretic. There are a great many other medicines used in Drapsy; but I will content myself by merely mentioning a few of the most approved among which are the preperations of Copper, Zinc, Iron and Mercury, the two last are frequently important in Drapsies of a weak arterial action. In ascites produced by disease of the Adominal viscera, Mercury is indispensable, also vegatable substances, such as Horse Radish, Mustard, Opium &c. The above remedies are some times used seperately and frequently together.

In atonic ascites the most of those remedies used to invigorate and Strengthen the system are recommended such as the Cold Bath, Exercise, Friction, Generous Diet and Tonics.

When Ascites is attended with watery tumours in the lower extremities, punctures, and scarifications are recommended.

The last remedy which I shall recommend is Paracentesis, which should be had recourse to, after giving a few of the most approved remedies a fair trial, provided there appears to be a large collection of water in the abdomen. This remedy should be repeated as often as the fluid is collected, The operation should not be performed half way between the umbilicus and superious anterious spinous process of the Ilieum, as recommended by some; but in the umbilicus or about one and a half or two inches below. In encysted Dropsy, we may find it necessary to operate in several places.

After having performed this operation, we should again have recourse to such remedies as appear best suited for the diseased state of the system, and we shall sometimes have the pleasure of preventing the return of this formidable collection of water —

as much as I love Cullen and his theory, yet I love truth & science more.

I come now to speak of the most exciting cause of dysentery: yet I do not intend to infer, that the disease, may not be excited, into action, by other causes— neither do I wish, to limit the disease, to one cause, alone, but the medicine, of an essay, is too limited, to give each, and every, cause, on those grounds, I shall content, myself, by giveing, the one, which I think, is the most exciting Relative to the contagious, nature, of the disease, as described, by Dr Cullen, I would, cheerfully admit, at this learned period, of the Medical world, that Intermittent, remittent, and autumnal fevers, and in short all diseases proceeding from, the Marsh family, to be contagious, as to admit, the contagious nature, of dysentery, all those who are, or may be, labouring under, the cause, of action, are liable, to the disease— but remove the cause, and we have only, the effect to contend against, and under these circumstances, the Physician, and the nurse, may visit with impunity; and for the future, I hope, we shall never hear of contagion or infection.

apprehended. Therefore that the proximate and most
exciting cause of dysentery is a suppression of perspi-
ration. The great outlet of perspiration, being the skin
it must ever be subject, to variation, in quantity, from
the vicissitudes of the air. It appears by Sanctorius
that perspiration, amounts to five eights, of what is tak-
en, into the body, Therefore, we cannot, be surpris-
ed, at the violent efforts, made by nature, on the
sudden suppression, of air which of such extent,

and if we attend to the stools of patients discharged
before the blood vessels are broken, we shall find
they are nothing, but a serous, acrid fluid, severed
from the blood. The consequence, of obstructed, per-
spiration, from whatever cause, is either great inf-
lammation, or great debility, Nor can it be doubt-
ed, that this fever, of the intestines, like most
others, is caused by, obstructed, perspiration, not
confined, to hot, cold, wet, or dry, seasons,
but October, pork, beans, liquors, or fruit

but chiefly depending, on some secret influence, in
atmosphere, or on sudden, transitions, of the a
and such other causes, as expose people, to th
perspiration, hastily stopted. In what man
this obstructed, perspiration, should be, direct
to the intestines, and not to the lungs, s
not prepared, to say. and if this conjunct
be only, some latent matter, in the bl
how be it, that in camps, and garrisons, a
the officers, and men, use a different, diet, fa
indiscriminately, in an epidemical season,
I believe that epidemical, dysenterys, have b
one, universal and common, cause, and m
be cured, by one universal, and common re
yet I do not, contend, that a particular,
may not be, created, by a particular, ~~reme~~ cau
and be cured by a particular remedy,
I do not calculate, on bringing the disease, a
a single remedy; but that, the cause of
disease may be well understood, and the

the bowels of the human body, being supplied of membranes - nerves, arteries, and veins - the secretions and excretions - are carried on, as in other parts of the body, I can not see why, they may not be, acted on as readily - by heat - Cold or the sudden vicissitudes of the weather, as the brain or lungs -

If the disorder in question depends, upon a spasmodic, stricture, of the large intestins, I would ask, what is better calculated, to produce this stricture, than a check of perspiration. The discharge by perspiration is known to be considerable; and of this thin fluid, reaches the surface, can be then say it is of no importance, surely not; knowing as we do, that by the evaporation of this fluid, a part of the animal heat, is conducted from the body - have it not for this process, would be injurious. The great drain from the human body, being suddenly checked up, febrile stricture as before observed, occupy the whole surface of the body - the brain - lungs - intestines -

the part which is most ~~debility~~ weakened at the time, fall into disease, and perhaps the ~~patie~~ afflicted being, a victim to his sufferings, merely for the want of a thorough knowledge, of the cause and treatment of this fatal disease.

When I commenced this essay, I calculated on giveing the cause, and treatment, in full, being a long distance from College, I painfully see, that my time is too limited, to comply with my wishes. But I take pleasure in acknowledgeing, that I concur in opinion, with the Professor of the Theory, and Practice of the College to which I have the honour of being a member - that opinion I glory in acknowledgeing - an opinion that has been so frequently avowed with honour to himself - and with pleasure to his pupils. Before I conclude however, I will say a few words - on the measures best to be taken for preventing the disease - as I conceive it is as requisite to be acquainted with measures —

that would prevent an epidemic, from prevailing
our country, as it is to have a thorough kno
of the treatment of the same.

To prevent the
plaint, those who are in warm climates, sho
carefully avoid, the coldness of the evenings, a
the chilling dews, which succeed the sultry days.
who are confined in Jails, or in camps, should avo
the vavours from putrid faeces, and if any
putrid diseases, be present, the bark, with
laxatives may be taken at proper inter
If there is any suspicion of the disease, appro
an emetic, should be given immediately, a wa
sudorific should succeed; and in the morn
a dose of some gentle purgative, to promo
the proper discharges from the intestines.
In the progress of this disease, the air should be
as pure as possible, and moderately warm: clen
is absolutely necessary; the excrements shou
immediately removed, the linen, and every th
about the patient, should be —

frequently changed.

The diet may be rice, sago, lemonade, the broth of lean meat, acidulated with lemon, or orange juice, jelly of animal substances, with cinnamon, or some other aromatic, by persuing this plan the disease may generally be prevented.

It is frequently said that prevention is better than cure, not that I concur in this opinion altogether, nor that I have seen it coming from patent, nostrums, Lees anti bilious pills, or from the remedy prescribed for the bite of a rattle snake, by a learned gentleman of Baltimore, which remedy I scorn to mention, in this place, as much as I do empiricism. As the forces in this disease are frequently retained Cathartics should upon principle proper, and when the same relaxation of the system has been produced they are found to be the most effectual remedys. Zimmerman rests chiefly on the use of the milder Cathartics.

neutral salts. the tamarinds, senna, and manna
and it will be indeed obvious, that these as well
as by their purging and relaxing power must be useful.

Before closing this essay, I cannot forbear mention-
ing that the difficulty under which I have la-
boured - has unavoidably prevented the preceding
pages from being handled - in such a satisfactory
manner as could be wished.

I beg leave in this place
to offer my thanks to each of the Professors for
the information, I have received from their
Lectures - and I cannot conclude, without
returning, my best thanks, to Dr Davidge, for
the information, I have received from his most
valuable Lectures, both public, and private, and
for his kind deportment, towards me
during the last two Sessions, that I have
had the pleasure of being a member of his Class.

remedies applied. Cho-u-no-ba.

I know that writers have written, very learnedly, on remote, predisposing, and proximate causes, and lays great stress, on heat, and moisture, putrid, ferments, infection, &c. — but upon, a strict, examination, we shall find, that there has been, too much, attention, paid, to these vague, uncertain, and never, to be defined, circumstances, while the primary, and immediate, cause has escaped unnoticed.

Epidemical diseases, can have, but one general, and immediate cause for what predisposing, cause, can exist, where every diversity of body, and age, are subject, to the same, symptoms, and cured by the same remedies.

The disease has frequently been, excited into action, by heat, and cold, taking unripe, fruits, into the stomach; but I ask, does not all those things, have a tendency, to suppress, perspiration, and the violence of the

disease is graduated by the cause of action.

I have known the disease excited into action by putrid animal substances or accidental stimuli taken into the bowels but those are not the general and most exciting causes.

And if the disease does not depend upon a suppression of perspiration for its most exciting cause, how be it, that the sailors, and soldiers, are more liable to the disease, than other people.

It is the soldiers life, to be much exposed, and it is his custom to be careless of himself, when he is fatigued or heated, he hastens to cool himself, in the breeze, or night air, and perhaps throws off his clothes, and often lies down, and sleeps in that condition. If he is wet he dries his clothes, linen, and skin together. By these means, perspiration, the great fountain, of health, in hot climates, are stopt, and fevers sometimes occupy the whole surface of the body.

-at diarrhoea and Dysentery equally consists of a
increased discharge by stool, the diseases have
generally confounded, and a diarrhoea espec
if attended with a discharge of blood, has
styled a Dysentery. The symtoms of diarrhoea
dysentery are somewhat a like, but there
can be no difficulty in distinguishing the diag
nosties of two such formal diseases in the
hands of the experienced or in the hands of
a mind that is well stowed with useful know
various observations have been recorded to disti
-wish the seat of dysentery, according as the blo
is more or less floried, or more or less mixed w
the ~~faces~~ faeces. The true seat of dysentery is
large intestines, generally their lower part, and
the disease is immediately owing to a spasmod
stricture, producing increased but ineffectu
exertions on the upper part, and this spasm
inflamation of the villous coat of the intesti

An Inaugural Dissertation.

On the Physiology of the Liver.

Submitted to the examination
of The Right Revd James Kemp Provost
The trustees and Medical faculty
of the University of Maryland.

By Robert Fulton
for the degree of Doctor of Medicine

on the 2 day of April 1827.

Physiologia Hepatis

The liver is the largest gland of the entire system and it descends under some modification or other from man to the lowest class of red blooded animals. Even below the rank of red blooded animals we often discover it of great magnitude as in the snail, oyster, muscle, and frequently, too when we cannot trace an organ corresponding in structure and aspect to the liver. We are compelled to admit the existence of an organ, which supplies its place, for there are many insects as the cynips quercii or gall fly, cerculio nucis or nut weevil, which secrete bile in such quantities as to tinge with a brownish yellow, the bough, nut or other substance in which they find a habitation, and to give them a taste as bitter as fel bovis.

But in various kinds of animals the liver is destitute of a gall bladder. Among quadrupeds are the elephant, rhinoceros, camel, horse, stag, goat, porpoise, and rat. Among birds, are the ostrich and parrot. It is also wanting in some fishes and worms yet there are but few reptiles without it.

Upon the whole it may be sit down as a fact, that the gall bladder is common to all carniverous animals. "Yet while we see this distribution" says Dr Good "we are ignorant of its cause and incapable of applying it." The very existence of this organ in almost all classes of animals, and more especially in the red blooded, being as common as the heart itself. Where even some of the other important viscera are very imperfect: give some proofs of its necessity. Its great size, the number and magnitude of the parts which compose its complicated vascular machinery; its enormous bulk in the early stages of fœtal existence, and its especial connection with the circulating organs at that period: all lead us to believe that it answers some very important purpose in the economy. Bichat says from serving as the seat of termination of the abdominal system of black blood, as the lungs do for the general system of the same description, the liver derives a degree of importance which does not belong to any secretory organs." Its appendage (the gall bladder) does not appear to be of equal use in the animal economy; since several animals —

among the mammalia as has already been remarked to not possess it; there are also some cases in the human subject in which it has been wanting. One related by Dr Cholmeley in Philosophical Transactions and another by Sir Everard Home in Medical Transactions, and no ill effects have been observed. The parenchyma of the liver is next in density to that of the kidneys. When cut the surface is smooth and made up of small points alternately of a reddish brown, and an obscure yellow. The substance of the organ may be easily torn, the surface is then unequal and granular, composed entirely of small granular bodies, with every variety of figure about the size of millet seeds and of an obscure red colour and soft consistence. These are the acini of anatomists, which are united together by cellular membrane. It is asserted by several microscopical observers, that a branch of the vena portæ, hepatic artery, vein and excretory duct of the liver, can be traced into these acini. It has also been said if the vessels of the liver be injected separately with mercury there is no part of the granular mass as large as a grain of Mustard

ed in which these vessels will not be found. This proves the great vascularity of the liver. It has also been averred upon good authority, that a fluid properly injected into one of these vessels will occasionally pass into all of them. The biliary ducts arise in all parts of the liver, (it is thought) by capillary extremities which are too minute for our most delicate research they unite after the manner of veins into larger and larger trunks, which at last end in producing two or three principal ones, quiting the liver at the transverse fissure, and then uniting into a single tube of about a line and a half in diameter, called the hepatic duct; this uniting with the cystic duct constitutes the ductus communis choledochus, which terminates in the duodenum —

The great peculiarities of the liver are that it is traversed by a greater quantity of blood than any other secretory organ, and that the materials of the fluids it elaborates are not brought to it by its artery. In addition to the nutrient blood furnished by the hepatic artery, it also receives a peculiar venous system called vena porta;

is consists of all the blood returned from the
bleen, pancreas, stomach, large and small
intestines. In short, from all the chylopoietic viscera
except the liver.
That the bile is secreted in the liver and
conveyed from that organ by the duct is certainly
true. But in what manner this separation is
accomplished is as yet an arcanum to physiologists
which time, talent and industry have never
unravelled. Physiologists for long time believed
that all the past varieties of animal productions,
which are traced in the different secretions
whether nasl, or tears, or milk, or bile, or saliva
were contained in the circulating mass. and
that the only office of the glands was to separate
them from this very complicated fluid. hence
the name of secernents or secretories, which means
nothing more than the power of separating.
This action was by the chemists supposed to depend
upon peculiar attractions or a play of affinities.
which was advanced by some. Modern chemistry
however has exploded all these hypotheses and
many others based upon similar principles

by proving that most of the secerned materials do not previously exist in the blood; and consequently that it is not an act of separation, but a new arrangement or recomposition, that they are produced out of its elements. —

It has for some time been a query from which set of vessels the bile is secreted. Physiologists have generally ascribed this office to the blood from the portal system: and they have considered the hepatic artery to be the nutrient vessel of the organ. as the bronchial arteries are of the lungs the coronary arteries are of the heart, and as the vasa vasorum. Bichat however believed that the bile was secreted from the arterial blood. And Magendie says "nothing dispels the idea that both sorts of blood serve in the secretion". "This seems" continues he "to be indicated by the anatomy, for injections show that all the vessels of the liver, arterial, venous, lymphatic and excretory communicate with each other. We shall cite the reasons given in each of those opinions, and note their objections. —

4th The excretory duct is larger than the artery a circumstance which does not occur in any other gland it size however is suitable to that of the vena porta

5th The agreement of the properties of the bile particularly it thick oily nature, acid taste, and dark colour with the supposed peculiar nature of the blood returned by the vena porta. This blood it is said is brought from very parts and most parts, loaded with fatty matter from the omentum mesentery &c. alkaline and acrimonious particles from the intestines particularly the large ones. The supposed stagnation in the spleen, has been conceived to impart some further peculiar properties favourable to the formation of bile.

6th Experiments upon living animals in which the secretion has been stopped by tying the vena porta

7th The distribution of the vein, after the manner of an artery combined with the particular qualities of the blood circulating in it.

8th The artery larger in the fœtus in proportion to the greater bulk of the organ, although the secretion of bile is very small.

that the bile may be secreted from the blood furnished by the hepatic artery, is certain A case is related by Mr Abernethy, & another by Mr Lawrence in which the vena porta terminated in the inferior cava near the renal veins, yet bile was found in the gall bladder There are several other considerations tending to weaken our confidence in the generally received opinion. Much reliance cannot be placed on the relative diameters of the artery & duct, if the latter be too large for the former. it ought to be regarded as too small in proportion to the vena porta. According to Bichat there is the same relation between as between the renal artery and ureter. We know of no comparative analysis of the blood contained in the vena porta. that warrants us in ascribing to the former qualities particularly suited to the secretion of bile. But, must we believe with Haller who expressly declares that the properties of the blood which the vena porta must necessarily acquire in its circulation cannot be discovered by analysis

With all the deference due so ancient and respectable authority, and with timidity of one our years and limited experience we shall say another Berzelius will only be wanting to accomplish this.

Bichat in support of his idea that the bile is secreted from arterial blood asks "Why is venous blood so particularly suitable for the secretion of an oily fluid; are not fat, medulla, of the bones and cerumen formed from the materials conveyed by the arteries?" That any thing is acquired by the blood in the spleen cannot be essential is proved by the fact, that extirpation of that organ does not injure the hepatic functions.

From what has been said it must appear that evidences are strong on both sides, but I think the mass of proof is in favour of the secretion from the portal system. Add to these the experiments which have lately appeared in one of the journals signed Annali Universali. Which I shall give at length —

In order to ascertain whether the bile is secreted from arterial blood or that of the vena porta.

it is necessary to tie either simultaneously or in succession the excretory duct, hepatic artery and vena porta.

Pigeons were the subjects of these experiments. Ligature of the excretory vessels. The bile being in the course of the secretion and not being able to be evacuated. the liver swells and becomes filled with globules of a bright green which becomes spread over the whole liver. the green becomes more distinct in proportion to the age of the animals, and the length of time he out lives the experiment. Ten or twenty hours hours after the ligature has been applied. the animals evacuate by the anus matter absolutely green, of the colour of the bile in the gorged liver. Which colour of the excrements goes on increasing in intensity until the death of the animal, and it was found that the green matter by which it is produced only exist in the blood. This fact united to the observations of Prevost and Dumas, who have succeeded in removing the biliary secretions by interrupting that of the urine, demonstrates that the kidneys and liver effect

each other more or less perfectly, respecting the secretion of their respective products, when it cannot take place by the natural channel.

3d Ligature of the excretory ducts and hepatic artery At the end of twelve hours, the surface of the liver receives a colour which also tinges the neighbouring parts: the canal becomes filled, and announces the presence of bile. Twenty hours after the ligature it contains a great quantity of green granulation more numerous on the left than the right side This also contains green matter as in the last instance. If the life of the animal is prolonged for Forty hours, the green colour of the liver and of the excrements becomes deeper. These experiments appear to prove that the separation of the bile followed for a long time, after the liver has been deprived of arterial blood.

4. Ligature of the hepatic artery alone.
In this case the liver does not become gorged, because the excretory ducts are free. After death it is found that the secretion of bile has continued, since it is found in the ducts. and also the materials contained in the intestines

present their usual bilious colour.

5th Ligature of the roots of the vena porta one of the excretory ducts. The liver is then directly deprived of its colour and has only a tint of pale rose colour analogous to that of the lungs of some birds, no trace of bile is to be met with in the intestines, they contain a grey or whitish pulp, the cloaca is full of excrement without the least trace or mixture of green, and notwithstanding many pigeons have lived in this state for thirty six hours. Only tying the principal trunk of the vena porta, to permit the gastro hepatic veins to enter the right lobe, which receives them, is at the end of fourteen hours, in its natural state. Whilst left lobe is without colour and presents on its outside merely a few traces of bile.

From these four series of experiments the result of which perfectly agree with each other it may be concluded. 1st The ligature of the hepatic artery does not impede the secretion of bile.

Dedication

to

The Faculty of Physick

of

The University of Maryland

by

Samuel F. Reich

"

Hepatitis. From ηπαρ the liver. It is an inflamation of the liver with considerable febrile affection. It is an inflamed state either of the concave or convex surface, an inflamation of the substance itself or of the membranes. Sallen and others suppose it to be an inflamed state of the extremities of the hepatic artery.

There are two varieties of this disease in which there appears to be a higher or lower degree of inflamation. the acute and the Chronic state.

Symptoms. The acute form of the disease is attended with a severe pain in the right side accompanied with considerable pyrexia. a frequent strong and hard pulse. It commences by a pain more or less acute in the right hypochondrium, in which region of the abdominal cavity, the liver is principally seated. the pain is increased by pressing upon the side and it is also much increased by respiration which is sometimes much oppressed. It is in some instances attended by a cough. the cough is most generally dry but sometimes may be followed by an expectoration. The pain is often seated in such a part as to resemble that of a pleurisy. the patient cannot lie with ease except upon the side affected. the pain is extend-

ed to the clavicle and top of the shoulder of the right side. The pain and uneasiness from lying on the ~~right~~ left side appears to be dependent upon the inflamed ligaments and membranes being put upon the stretch. The disease is sometimes attended with a hiccup, nausea, and vomiting of billious matter in these cases the concave surface of the liver is generally affected and vomiting takes place on account of the communication of the inflamation to the stomach which it irritates. In some cases the disease is said to occur with a yellowness of the skin but very frequently the disease occurs without these symptoms being present, they are thought to be dependant upon a regurgitation or reabsorption of the bile which occurs very rarely. In all cases of inflamation of this viscus the quantity of the bile is increased and the evacuations are billious. The disease is sometimes seated in the membranes in these cases the pain is more acute and when seated here it is generally of the Acute form of the disease generally when the substance of the liver is inflamed the pain is not very acute at first but gradually increasing shoots up to the shoulder and clavicle.

Symptoms of the chronic state of Hepatitis. This form seldom exhibits many of the symptoms of the acute state. The pain felt in the region of the liver is more obtuse and dull - there is rather a sense of weight and fulness in the part. The chronic state according to some authors commences with the dull pain accompanied with a morbid complexion, loss of appetite and flesh, costiveness - indigestion, flatulency, pains in the stomach, a yellow tinge of the skin and eyes clay-coloured, urine depositing a red sediment and ropy mucous; the obtuse pain in the region of the liver extends to the shoulder and not unfrequently with a considerable degree of difficult breathing.

But in this form of the disease some of the symptoms ~~have~~ are in many cases so mild as to pass frequently unnoticed.

The chronic often affords no signs by which it can be distinguished. This form appears to me to be the result of a neglected or ill treated acute case.

Causes. The causes of acute hepatitis are external violence from contusions or falls and especially those which have occasioned a fracture of the cranium. Certain passions of the mind are said to produce it. Violent summer heats. violent exercise. Long continued intermittent fevs

remittent fevers. Cold applied externally or internally
and therefore the causes which produce the different
species of Pneumonia may produce this disease in
some subjects. Various solid concretions as calculi or
collections of liquid matter in the substance of the
liver produced by unknown causes. In warm cli-
mates the Liver is more apt to be affected with
inflamation than perhaps any other part of the
body probably from an increased secre-
tion of bile which takes place when the blood
is thrown on the internal parts by exposure
to cold; or perhaps from the bile becoming acrid
and thereby exciting an irritation in the part.
It is also in warm climates produced by the com-
mon causes of internal inflamation and is
then preceded by fever and by obstructions of
the hepatic ducts. It is sometimes a consequence
peripneumony the inflamation having been
communicated from the lungs to the Liver.

Terminations of the disease. It may terminate either
by Resolution Suppuration or Gangrene.
The disease is seldom attended with fatal conse-
quences of an immediate nature. It generally termi-
nates by resolution often carried off by haemor-
rage from the nose or haemaroidal vessels and
by prompt and proper treatment it will
in almost every case end in resolution.

When it terminates in Suppuration an abscess is formed and the pus or matter is discharged - this discharge though may be various according to the different seats of inflamation or places of adhesion. When a communication of an inflamation takes place towards the peritoneum and external parts and an adhesion be to the peritoneum which lines the common integuments the discharge will be externally through the wall of the Abdomen - or if this Inflamation extends towards the diaphram and adhesion takes place to the diaphram the pus will penetrate through this into the cavity of the thorax or of the Lungs and through there may be discharged by coughing.

When the abscess is seated on the Concave surface of the liver often in consequence of the adhesion to the stomach on intesting the discharge will be into there. The discharges will be generally wherever the inflamation or adhesion takes place or the adjacent parts.

Treatment

In the acute form of this dicase when the inflamatory symptoms run high, the treatment should be commenced by blood-letting and with a good deal of freedom from the arm - which should be repeated until there be an abatement of the symptoms; in some cases the local abstraction of

blood may be usefull. The neutral salts may be first given to purge - next the Calomel should be given and followed up by senna and salts to evacuate the intestines completly of billious matter and to unload the glands of the diseased part.

When by these means we have lessened the inflamation we should endeavour to promote diaphoresis by medicines of the diaphoretic class which may be assisted by the warm bath. The antiphlogistic regimen should be adhered to throughout the disease. The use of small doses of Calomel must not be neglected to evacuate the bile, and when the alvine evacuations are deficient in that secretion it will be proper to push Calomel or some other preparation of Mercury till the mouth is in some measure affected. Should the disease proceed to suppuration means must be used to support the strength of the system, a nutritious diet with a moderate quantity of wine if the patient be low and feeble. the decoction of bark may be used with benefit and whenever the symptoms of suppuration begin to appear it will be found usefull to commence with the bark in substance in doses of ℥ss 4 or 6 times a day increasing in quantity. If the abscess points externally it must be encouraged with fomentations and warm poultices to promote the discharge and if any fluctuation be perceptible it will be best to make an opening least the abscess burst internally. In hot rea-

ions or climates when the circulation is languid and the liver suffers from inaction, mercury is then the remedy chiefly to be relied upon this is a medicine which gives tone and activity to the circulating system - it may be used both externally and internally - in the latter way it appears more ~~healthy~~ effectual in restoring the healthy action of the liver - But in irritable states of the stomach the mercurial ointment is preferred - In scrofulous subjects this remedy must be used with caution. when the system will not admit of an adequate use of the mercury the nitric acid can be substituted In many cases during the disease tonic remedies and blisters may sometimes be required which should be used.

March 17th 1827

Samuel H. Reich

gadenic ulcers or gangrene appear. Farther to enumerate the different diseases of this important organ, as shown by dissection, would be superfluous, cially since our boasted art bows submissively to their fatal career.

aisposing causes. — The Hereditary predisposition is very great, and if eaes not end in apoplexy, it is liable to terminate in mania. *

age. — It is generally remarked by all writers of note on apoplexy that is a disease of advanced life, seldom occuring earlier than the fortieth and generally about the sixtyeth year, this has been stated to be g to the Plethora venosa of Dr. Cullen and Proved by the experim- of sir Clifton Wintringham. This state very certainly predominates this time of life.

arge head, has generally been supposed to be a circumstance which isposes to apoplexy, and it is generally believed that this disease hap more frequently in such cases than others, perhaps from the un- mon size of the head, we may account for the effect of the predis- ition, and might be considered, as produced by the determinatio lood to the head, rather than as being its cause.

sity. — This is supposed to produce apoplexy by compressing the els in other parts of the body, thereby more readily filling those of

Dr. N. Potters Lectures.

the brain, which are entirely free from such compression; the return
blood thrugt the veins of the head towards the heart, is especially interrup-
by every circumstance that produces a more difficult transmission
blood thrugt the vessels of the lungs. It is well known, that at
end of every expiration, some interruption, is given to the transmissio
blood thrugt the lungs; and that this at the same time, gives an
ruption to the motion of the blood from the veins into the right
ricle of the Heart. In this manner are also explained why poly-
connections in the cava, or right ventricle are found to occasion
plexy.

short neck, is no doubt one of the predisposing causes of apop-
; this is very probable, since the heart must necessarily be
ver the head, and the blood of course flow to it with more force
le at the same time the return of the blood thrugt the veins
he neck is more easily interrupted, especially in the corpulent
it. — To these causes may be added, an indolent life
ful, and long application of the mind to one subject; Grief
anxiety, or any cause which weakens the vessels of the brain
produce it; Many other causes, which predispose to
plexy have been noticed by authors; these I conceive to be second-

mediately objects, since they reflect but little light on the immediate
ject of investigation.

casional causes. The remote occasional causes, from which
brain may suffer compression are so numerous, that an attempt
name them all, would at least be superfluous, if indeed it were
in the sphere of possibility. I shall therefore content myself with
tioning such of these causes as are most likely to occur and
t as are most commonly found preceding or accompanying
disease; among these are, violent passions of the mind as
ger &c These appear to result in a preternatural determination of
od to the head; as may be seen by the turgescence of the blood
sels of the face, while under the influence of such passions.
f, Fear, and joy, and all passions sometimes terminating in
oplexy: The story of Dr Rush (which is familiar to all those
the medical profession;) of the door keeper of congress who died
denly of this disease, from joy upon hearing the news of the
ture of Lord Cornwallis and his army, in the american revo-
tionary war;* is a remarkable instance of the effect of this
sion

* Diseases of the mind, p. 339.

ent and Sudden exertion. - This I esteem as one of the occasion-
causes of our disease, since it retards the passage of the blood
ugh the lungs from the right side of the heart, and of course
mps the return of blood from the head. Its effects are man-
t in its universal concomitant suffusion of face.

miting. - We now consider a powerful occasional cause of
plexy. In the act of vomiting all the contents of the abdomen
violently compressed, while the Diaphragm and Abdominal
scles are in a state of convulsion; the blood in the ascending
a is sent with more force to the right side of the heart,
eby impeding the discharge of blood from the descending
n, and the descending Aorta will also be pressed, thereby
ing the blood a greater determination to the head: add
this during the act of vomiting respiration is impeded
that the right ventricle of the heart cannot discharge
blood into the pulmonary vessels; hence the return of
nous blood from the head is impeded; while there is
the same time a great quantity sent up by the large
ens, and apoplexy is often the unfortunate consequence
rupture of some of the vessels of the brain.

An Inaugural Dissertation

On Gastritis

Submited to the Examination

Of the Right Revd James Kemp D.D. Provost

The Trustees and Medical Faculty

Of the University of Maryland

For the degree of Doctor of Medicine

By

Austin Smith

King George County

Virginia

April 2d 1827.

Gastritis. —

This disease was known to the ancient medical writers, as well as to the moderns, the Stomach as the term implies is the seat of the disease. The importance of this viscus to the animal economy, should render its diseases interesting to every medical student, and to all who furnished with the materials to correct the morbidities of nature. —

The stomach is that organ which carries on the process of digestion, it is that great organ which prepares the food for the support of life, and we can but determine when it is organically or functionaly effected, that the system must either perish, or be materially injured in a short space of time. —

Out of the number of diseases to which this viscus

An

Inaugural dissertation

on

Injury

For the

Degree of Doctor of Medicine

Submitted

To the Examination

of the

Rt. Rev. Bishop Kemp, Provost,

the

Trustees and Medical Faculty

of the

University of Maryland,

by

Alfred Ignatius Fort,

of Baltimore.

Diseases have generick differences; they differ in kind as well as degree.... Laws of Nature

Baltimore April 2nd A. D. 1827.

To

Dr. John Cromwell, Senr.

the following pages

The Inaugural fruits of a medical

Education

conducted under his Care,

are,

with sentiments of the highest veneration

for his talents,

Respectfully dedicated;

as

a tribute of friendship, gratitude, and esteem,

for every attention which could facilitate

the Studies, or benefit the mind, of his

Grateful pupil,

Alfred Ignatius Tort.

Preface.

The motives for writing, by individuals are exceeding various, and should always be attended to by those who are to pass judgment the performance. My motive is plainly inscribed on the title which at once bespeaks necessity and compliance. If this then considered, nothing very exalted or extensive can be expected; on the contrary, a simple, plain and short treatise on a disease which is chosen, because it has spread its fatality, among those, have been held most dear by me, and because I am acquainted it by frequent observation, rather than with an expectation it more justice than it has hitherto met with. This with the ration of its being the first fruits of my studies, will I trust tain a pardon of every imperfection, from those of better judgm

Inaugural Dissertation.

Apoplexy, from the violence and suddenness of its attack is justly
teemed one of the most distressing and formidable diseases to which
mankind is liable. It has from my earliest pursuits in medicine gain-
much of my attention, and its frequency and fatality among
ose who were dear to me; and also those who were not related,
me, by that sympathy which is natural, (or at least ought to be)
ong mankind, has excited a spirit of inquiry, which I trust
ll not be destitute of its uses to society; though centered in a
ains as yet unknown in the Temple of Medical Science.-
e delicacy and vital importance of the organ assailed by
s disease, renders its career so rapid that in a few moments
may commit irremediable mischiefs;- It may blot the bright
t ornament, society has to boast.

History of the disease

...plexy is thus defined by Professor Dawidge "All voluntary ...ion suddenly lessened, face somewhat tumid, and purplish, with ...or, more or less profound, and snoring; the action generally full and ...ng of the Heart and arteries continuing;" this definition is nearly ...e to that which is given by the illustrious Cullen, who omits mention... the stertorious breathing* (and surely with some chinical accuracy) as ...athognomonic symptom of the disease, and which are to be found ...the writings of Vogel and Sagar, and even in those of the distinguished ...nham. Stertorious breathing is supposed (and I believe with much ...ce) to be particularly attendant on the worst forms of apopletic dis... but that this is universally the case, as has been affirmed, I ...leave to doubt, first; from a well marked case of the disease ...t fell under my own observation unattended with the least ...or, and secondly; from the reports of the accurate Morgagni who ...les dissections of apopletic persons when the effusion was considerable ...no stertor had occurred;- Apoplexy sometimes seizes suddenly ...out any premonitory symptoms, striking the unfortunate subject to ...ground, and bereaving him at once of the voluntary efforts of every function

* mentioned by writers.

tion both of body and mind: It is much oftener however, prece-
ly various symptoms, such as head-ach, vertigo, slow, tense pulse
lination to motion of every kind, with drowsiness and fits of Inculus
degree of numbness, or loss of motion in the extremities, some faultering
tongue in speaking, with the voice unusually slow, pneumonic
toms sometimes present, hoarseness, respiration sometimes impeded, Langui
lation through the lungs, the appetite begins to fail, the complexion
Cadaverous look; some are disposed to sleep more than usual, they
though the day, the patient is often timid, and acts inconsistently
tory interruptions to seeing and hearing with loss of memory and
hurant replies to questions proposed, there is a sense of tightness across
ne head, and a Throbbing in the occiput, heaviness, redness, and
ess of the eyes, with temporary blindness; when to these symptoms
popletic paroxysm has itself succeeded; the face for the most
is flushed, the eyes fixed and glazed dilitation of the pupil, res-
tion is difficult, irregular and sometimes stertorious, while the pulse
ims very full, slow and hard; the bowels are always constipa-
except the spincter ani be affected with palsy when the faeces
discharged involuntarily; the excretion of saliva is augmented
appears in the form of white froth without the mouth, the
senses

s, together with voluntary motion are greatly impaired or totally abol-
; or as I have hinted before according to the force of the hunting pow-
producing the disease, are the faculties of both mind and body
titated, deranged, or entirely destroyed.

r as my information or experience extends the above is a full his-
of the symptoms and appearances of what has been termed Sanguin-
apoplexy. The term Serous apoplexy has however been applied to a
f symptoms differing somewhat from those already enumerated,
resulting no doubt from the same action, or proximate cause. That
lexy has, by medical writers, been denominated Serous, which from
tate, or temperament of the patient may be supposed, or from the dis-
on of the body after death, is known to result from serous exhalation
the brain." This may be doubted when we know by experiments that
m will coagulate either, by the action of heat or of acids; the
d which is secreted in Cronic apoplexy will not coagulate as
been proved by the experiments of Professor Potter, which are
ived in his lectures on this subject. In Serous apoplexy the
tack is generally more gradual, the face is pale and tumid,
pulse is small, weak, and intermittent, and the extremities
cold and flacid. - It is stated by authors that the cases
of

disease may be best determined from the subjects and circumstances of
ttack; it being observed that plegmatic temperaments, cachetic habits
advanced age are most commonly its victims; It does not rest
me to determine this point, suffice it to say that it has many appo=
and among these I would mention the Professor of the Theory and
tice of Medicine, in the University of Maryland.* Although in both
forms of our disease, the whole of the body is affected with a
f sense and motion, yet it sometimes takes place more upon
side of the body than the other; in which case, the side least
ted with palsy is often convulsed.

om this unhappy state we sometimes have the satisfaction to
our patients restored to their pristine health and vigour, but
e frequently, (if by early assistance the immediate violence of the
se is subdued,) they lead out a miserable existance of Hem=
gia, fatuity, or some other distressing relick of the original aff=
n. — Hence the remark of the celebrated Boerhaave; "Soporosi, neb=
pusillanimes, vertiginosi, remanere solent." + It sometimes happens
an apoplectic paroxysm is happily arrested by some spon=
ous evacuation, as Hæmorrhage, profuse sweat, &c; leaving the
patient

* Dr. Potter states that he has seen Apoplexy in all the Temperaments.
\+ Aph. 1018.

ut in the usual enjoyment of his faculties, this, however, is very rare;
even when by the combined effort of nature and of art, the present
er is averted, the system is generally left in a state of predispo-
to future attacks which sooner or later prove fatal. When to the
alarming symptoms of the disease, which been above enumerated
difficult deglutition, a weak, small and intermitting pulse succeed;
hen drink is returned by the Nostrils, violent convulsions sup-
e and partial cold sweats break out over the body; but little
of a fortunate termination can be entertained; and the patient
sinks under the mighty hand of Death.

gnosis. The diseases, for which apoplexy may be mistaken,
Hysteria, Syncope, Epilepsy, and Ebriety. —
om Hysteria, Apoplexy may be easily distinguished; The Hyp-
e pain of your commonly begins with pain in the left side
ut the flexure of the colon, with a sense of distension, pro-
ing upwards till it gets into the stomach, from thence it
into the Throat; it occasions by its passage a sensation as
ball were lodged there, which by authors has been called
ons Hystericus. These are symptoms which do not occur
apoplexy; the age of the patient, will also be a useful
guide

le in distinguishing these diseases. Apoplexy occuring generally to
over the fortieth year, and Hysteria, generally to those under the
fifth years of life.

Syncope, the difference is very obvious; in Syncope the action
~~of action~~ of the Heart and Respiration become considerably weaker
usual, in Apoplexy these functions continue; in Syncope the
is pale and contracted, and the eyes generally closed; in Apo-
the eyes are open and fixed, the face is red, and turgid.
age, sex, and temperament of the patient, must always be
sidered; young persons and those of delicate habit, and therefore
men, rather than men, being the subjects of Syncope; while
ns advanced in life, those of a robust form, and sanguine
mperament, and therefore men, more frequently than women
ing the victims of Apoplexy.

om Epilepsy, it requires more attention to distinguish from Apoplexy;
between those already enumerated; in Epilepsy sense and volun-
y motion are equally disturbed, as in Apoplexy, but we never have
convulsed state of the whole body in Apoplexy as in Epilepsy
ch is also preceded by that sensation termed Aura Epileptica
this be recollected, and from the history delivered above we will
find

I presume, no difficulty in distinguishing the two diseases

iety. The soporose state induced by the immoderate use of Intoxi=
g liquors, might be mistaken for Apoplexy by a superficial Observer.
the phenomena of disease, the Sleep is not so profound in a state
Stricty as in Apoplexy, nor are the organs of sense so much stunned
and Paralysed. We are directed in our diagnosis by the scent
the breath, appearance of the face, &c, It will not be amiss, to rem=
here that all those distinguishing signs above enumerated, may
much from their general appearance; hence the judment of the
ctitioner should always lead him to the true nature of the disease
he may employ such remedies as his good understanding may
t. —

Dissection of the dead body.

om dissections of persons who have died of this disease, by Morgagni,
ertand, and Willis; and by the reasonings and experience of many
the most respectable, learned, and worthy of our profession, it
pears that, that species of disease usually denominated san=
neous Apoplexy is directly induced by over distention of the
oodvessels of the brain, or rupture of these and consequent
ffusion of that organ. Professor Potter also states in his Lec=
es on this subject, that the disease consists in an increased
action

on of the vessels of the brain ending in effusion, and that the species
ally termed serous is the result of the same action only differing in degree
has however been controverted by authors of no inconsiderable fame.
hers in their turn asserted that Apoplexy is never the offspring
ver distension of the bloodvessels of the brain, or of effused serum
load upon that organ; - The former of these opinions I am disposed
eive as the most correct. From the dissections of Mr. John
ter and Doctor Fordyce, it would appear that extravasation
ween the skull and dura Mater, the dura Mater and pia Mater
into the ventricles of the brain, more frequently produce apoplexy
any other cause. In a great number of bodies dissected by the
lemen, extravasation was always found to be the immediate
se of the disease.

ying upon these observations, is it not right to infer, that com=
ssion from Extravasation or over distension of the bloodvessels of
brain is always the proximate cause of apoplexy.

ubstance of the brain itself is found in various diseased condi-
sometimes it is much harder, at others times much softer and more
id than natural; sometimes Tubercles, or Tumours, and at others

Dr John Brown.

Phag-

reme Intoxication.— The disease produced by excess in wine or
rits, or other powerful stimuli, such as Aether Apinons, &c. may be
ided into three stages. The first is that in which the person has
ual unnatural perceptions, his judgment however, remaining still
ue. The second is a state of perfect delirium, in which he talks
d acts unreasonably. The third is a state of Coma which if
ited a little farther will end in Death by effusion. There is a
tain point of Intoxication, when a person sees objects double, and
has so much of understanding as to know that it is a mere il-
ion of sight, proceeding from the wine or spirits drunk. He has
oneous perceptions but yet is not delirious. at such a period a
on is still capable of conducting himself with tolerable propriety; he
es a distinct and rational answer to any question, proposed, but
is not always very distinctly pronounced. If more strong liquor
taken, a state of delirium ensues, in which the patient talks Idly,
d unreasonably; emits screams and ejaculations; laughs and
ears alternately, and has no command over his actions. If the
auch is continued, he at last falls from his chair in a state
ich is commonly called dead Drunk. During this time of this
ce, there is considerable disorder prevailing in the heart and arteries;
The

circulation is much quicker and stronger than usual; the pulse rises
th in frequency and force; the heat of the skin is increased, the face
ves, the eyes become red and suffused, and a great determination
blood to the head is evident; and as the poet very aptly des=
bes.

"By this slow self murder – worse than suicide,
Hath rag'd the works of Heav'n – natures pride
Behold! how chang'd his form, how red his face
How full of pustules, bloated with disease."
"Tho' poets madly sing the joys of wine,
And round the brows of Bacchus flowers entwine;
Their sickly song and artificial mirth
Awhile so boisterous, ends in woe and death."

sympathy. – apoplexy is said to be produced by sympathy, between the
mach and brain; from blows received on the region of the former. of this
am not prepared to determine.

the causes now mentioned, as occasioning apoplexy, I may add other
uses producing the same disease, by directly destroying the mobility
the nervous power. such causes seem to be the mephitic, arising
om fermenting liquors, and from many other sources; the fumes
ising from burning charcoal; the fumes of mercury, of lead, and
some other metalic substances; opium alcahol, and many
her narcotic poisons." To which may be added; large suppers

-den expansion of the solids of the body in the spring; warm bath im-
-perly used, Fracture of the bones of the cranium, pressing on the brain,
power of Cold, of Electricity, violent Stimulation, posture of the body

<u>ognosis.</u> — In some cases of this disease, it is almost impossible to
-resee the event; in others however, the prognostic may be formed with
-siderable certainty. In forming the prognosis, the following circum-
-ces should be especially considered: First the age, strength, constitution
-d former habits of the patient; secondly, the symptoms, nature and
-ation of the disease. Thirdly and lastly, its particular remote causes
the Coma and other symptoms are slight, and the strength not much
-haustice, the probability in favour of a recovery is very great; but if
symptoms continue violent, for some four or 5 days, and the pulse, which
been all along full and slow, becomes quick and frequent, there is
little hope of a fortunate termination, and the scene is generally
-sed by Death or Hemaplegia.* When the disease depends on the
-ddencepation of any usual evacuation, and this returns, together
-th a gentle and durable sweat, the prospect is favourable.
-pious discharges of urine, containing the latentious sediment, spon-
-neous evacuations of the bowels, and hemorrhages have all bro-
-ught, on

* Macbride.

resolution of our disease. When on the other hand, the breathing
tertorious, the patient has lost the power of deglution, and fluids
returned by the nostrils; when there is a cold, clammy sweat over
surface of the body, when the bladder and spincter ani are paral-
, and the urine and faeces are discharged involuntarily, when
ace has a cadaverous appearance and the eyes are flacid and
; then indeed may we soon expect to see our devoted patient
under the chill hand of merciless death. If the patient is per-
d ~~is perceived~~ to be perish, if you put your finger on the
e you will find it Tense,* hence the necessity of paying par-
lar attention to persons predisposed; we are advised never to
air while the pupil contracts from light.†

ophylaxis.— Since there is no disease to which the human body is liable
se attack is more violent, or whose permanent cure is more difficult,
becomes necessary to offer some advice that will most likely prevent
occurrence. In persons predisposed by nature to this disease, the anti-
logistic regimen should be strictly observed and moderate exercise
ly practiced. A vegetable diet should be employed, and ardent
ors of every kind religiously shuned. Supper should be either entire
omitted or sparingly used, and the bowels kept gently open
by

* Dr. Potter. † Dr. Potters Lectures.

some mild laxative; hence the use of an ascessant diet. - The time
tted to sleep should be very limited, as it promotes the Plethoric
position. they should also sleep on hard beds; the deep is all
portant, flannel is to be worn and excessive heat and cold avoided
truth every cause which can determine the blood to the head, or produce
direct debility should be carefully avoided. Enhines and every
ing which can produce violent sternutation, or a full inspiration,
ould be sedulously shunned. - In fine the judicious regulation of what
s been termed the non-naturals, seems all important to the Proph-
laxis. These however are much abused by the baneful practices of
modern life. The rich sauce, spicy ragouts and entrements,
ttered by fragrant aromatics, however savoury and pleasing to
taste, are most assuredly the inviters of the most formidable
ladies. "Excesses in devotions to the deities, Bacchus and Venus, seem
have become fashionable vices of early life, and unfortunately for
ndad Humanity, life's real pleasures are too often either drowned
cups of jollity and mirth, or lulled into never ceasing repose in
arms of the fair". "Sobriety, temperance and virtue, insure vigour
the constitution, ~~and~~ and keep the understanding free and undis
rbed."

Method of Cure.

he distressing and fatal consequences, that have hitherto followed the
ogress of apoplexy, have in every age, called aloud upon the sym
thies and exertions of the medical world. For the cure of this disease
hether from causes, external or internal, the proper remedies should
immediately and promptly employed, — If the cause proceed
m without, such as violence offered the skull, thereby fractur-
and depressing a portion of the Cranium, the Chirurgical Ope-
tion for elevating the depressed bone and thereby relieving the
pression of the brain, should be immediately performed and
ceeded by blood-letting, purging, or any such remedies as
condition of the patient may seem to require. If however the
ease proceed from internal causes, (as is most frequently the
,) the practice should be directed as follows.
the cure of sanguineous apoplexy no time should be lost, in
pluying the most active remedies.

loodletting. — On the persons being seized, due care should be taken
remove all compression from about the neck, in short they sh-
ld be stripped of every part of their dress, except such as the law
Modesty shall require.* The patient to be supported in an erect
posture

* Dr Potter.

Method of Care.

time, and to allow a free admission of cool air. When the patient
of a full habit and the disease has been preceded by marks of
plethoric state, he should immediately loose eighteen or twenty
ces of blood; but this should always be determined by the habit
stitution, and present condition of the patient. The Jugular
in should have the preference, but it may be taken from
arms, or foot. it is a matter of no consequence which side the
od is drawn from, whether the paralytic or not; The opening of
temporal artery, I deem of little importance, since it appears
me, that the distended vessels of the brain would be more imme-
tely relieved by opening a vessel which leads directly from them
n by cutting off in some small degree only, the blood des-
d to be borne on a augmenter of the disease, but which has as
had no diseased influence.

<u>ping and Scarifying</u> - have also been recommended, to the Temples
a back part of the head, if bleeding has been practiced as far
the strength would permit without removing the symptoms
<u>ring</u> is another remedy to be properly and actively employed
the treatment of this disease. If this cannot be effected by the
uth, which is always the case in the fit, Injections of a Drastic
kind

o should be employed; they should be employed frequently, as the
sibility is nearly destroyed. If the patient can swallow Calomel
excellent followed by Senna, or Sulphate of Magnesia, to bring on
action; Calomel promotes the secretions. It is recommended in doses
10, or 30 grs *
Blisters, or Cataplasms of Mustard. In the last stage of our disease
e most excellent; you should always carry your Lancet as far
possible before the use of blisters, but when used they should
be applied to the head, to the nape of the neck, or between the shoul-
ers. Setons are most excellent, after the usual evacuations; and the
head remains affected; they should be constantly worn by persons
subject to Apoplexy.
Cold effusion. In the worst forms of Apoplectic disease, when the
stertor and comatose symptoms run high, it has been recommended
employ the cold effusion to the head; in the form of ice placed
bladders, this seems to be a very ready means of exciting and bring-
g the patient from his senseless condition; Cold effusion may be em-
loyed to different parts of the body. Ice sometimes produces
blackness, therefore it should not be kept on too long at one
me but may be often repeated.

* Dr. Potter.

limited views which we at present have of what has been improp-
ly termed serous apoplexy, will necessarily lead to a cautious, and
sometimes, perhaps, an insufficient treatment of the disease. It seems
me proper that blood-letting should be restricted to much narrower
mits in serous than sanguineous apoplexy; as it is more difficult
us to ascertain the state of the blood-vessels of the brain, in the former
n in the latter of these cases. We are directed of late, to enable
d letting to a greater extent than was formerly practised, only
are to take small quantities at a time, and to be often repeat-
. In the form of our disease termed serous, the blister should
applied especially to the scalp, but if the symptoms be urgent,
the back and extremities also; with a view principally of hastening
absorption of any fluid that may be effused. To this end are
e also indicated, purgatives of the stimulating kind.
timulants of various kinds, have been much employed in this form
our disease; but as they determine the circulation to the head, their use
ems somewhat doubtful; when, however, they are to be employed, suf-
icient evacuation should precede their use.
When apoplectic symptoms proceed from opium, or any other nar-
tic poison taken into the stomach, the offending matter ought to
be

thrown off as soon as possible, by the use of emetics, at the same time
ing the lancet, and purgatives, that the stagnation of the blood and
sequent congestion may be removed. Dr Potter in his lectures on this subj-
t states, that if your patient have over distended his stomach and
caused symptoms of apoplexy in this way, if you bleed very pro-
ely, your patient will certainly puke up the contents of the stomach
Coup de Soleil, or stroke of the sun, which is so common in warm
mates, is to be treated in the same manner as pointed out for the
atment of sanguineous apoplexy.

those violent cases of apoplexy when life seems to be almost extingui-
ed; sinapisms, applied to the palms of the hands, and soles of the feet, and
ctions to the spine and extremities have been found highly serviceable
t in this condition, sanguine expectations cannot be indulged, and if
r best exertions should fail, it must console us to know, that we
e baffled by a disease whose fell career has seldom terminated but in
ath.

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is subject, I have selected the acute inflamation, nominated gastritis, as a subject for my dessertation. — In treating this disease which is so fallacious and pernicious to the Human race, I shall endeavour to do justice to myself, as well as to my instructors. — Shall first enumerate the causes, — 2ª Symtoms, 3ª termination, and 4th Cure. The nervous and villous coats of the Stomach are principally effected, sometimes one is effected, and not the other. — This disease is divided by Dr Cullen into Phlegmonic, and erythematic, this distinction is unnecessary. — This disease is both Idiopathic and symtomatic, depending upon external and internal causes, when either the Liver, Peritoneum or Intestines are first effected and extends to the stomach, is said to be symtomatic, when the Stomach is first effected, is termed Idiopathic. — —

The external causes are contiguous near or about the adjacent parts, low temperature, cold water applied externally to the whole body, check of perspiration from change of air &c. This disease appears more frequent-

ly in the hot summer months, than at any other season of the year. – Internal causes, are large draughts of cold water, producing indirect debility, reaction taking place, and consequently inflamation, if a person who is much excited from hard labour or exercise of any kind on a hot day, and take a large draught of Ice cold water will produce comma and death, but if death is not the consequence, inflamation is inevitable, if simple coma; may be relieved by Laudanum, and the patient may escape from the disease; Should inflamation be the result, must be treated as I shall show hereafter. – Acrid substances applied to the stomach, vitiated secretions, overdistending the stomach with indigestable food, such as Pickles, Cabbage, Turnips, Ice Creames &c. – Drinks of various kinds, as Ice Punch, Ardent spirits, will produce the disease. Poisons of all kinds, that is of the mineral kingdom, as corrosive sublimate, Arsenic, preparations of Lead, sulphate of Zinc &c. – – – –

Symtoms, fever, furred Tongue, Dye skin + depressed tense pulse, sometimes deceitful, pain in the Epigastric region, inability of the stomach to perform its duty, head sometimes sympathises with the stomach, pain delerium &c - the stomach very irritable will not retain any thing on it, Emesis frequently and almost always an attendent symotom, sometimes to an excess, producing prostration of the system almost immediately, listleness, Retching. —

This disease sometimes terminates in supuration and Gangrene. Dyspepsia is frequently a consequence of Gastritis, and sometimes terminates fatally, Dropsey is another consequence of Gastritis, difficult to cure; dropsey is more frequently its termination when the disease is produced from ardent spirits; Scherrus Pylorus may be deduced as one of its consequences, and finally results in anasarca. — After having enumerated all the causes which produce this disease, and its attending symtoms, shall next frame a system of practice for its cure. —

From what I have said above you can but conclude that this is an inflamatory disease, and must commence its cure by depleting measures. The most valuable depletory in this and all other inflamatory diseases is the lancet, the length to which it may be carried is unbounded, though we should judge of its beneficial effects, according to its merits.—The strength of the patient and the violence of the disease must be our guide.—Small and repeated blood-lettings are advisable in this disease, the pulse will rise under the use of the lancet, the pulse sometimes small, low, but frequent, on pressure you may discover some tension, this is indicative of inflamation and calls for the lancet.—From the excessive irritibility of the stomach we cannot make use of any internal means as evacuents by the mouth, have to resort to Enema's.—The bowels must be kept open by Injections of Sulphate of magnesia, Sulphate of Soda &c. This will assist in reducing inflamation.—

After the general remedies have been carried as far as the state of the patient will admit, local remedies then become our next means; must be effected by applying Leeches to the Epigastric region; Blisters should be applied, though, after inflamation is subdued, when merely local congestion remains. — Blisters should never be applied as long as there is any General inflamation will aggravate the disease. — Generally there is soreness over the whole abdomen, when this is the case a Blister large enough to cover the Abdomen, should be applied, the most effectual means to remove the disease. — The warm bath is used in the same state of the disease, and with the utmost advantage, it relieves tension, determins towards the Skin, and restores its secretion. — In a chronic state of the disease, we may venture to use some mild purgative administered by the mouth, as Castor Oil, Olive Oil &c. —

Dr. Potter relates a case of a young man who was effectually cured by the use of Olive Oil,

after all other means had failed, it should be given in large doses.— New milk has been used by Dr Rush, and cured the disease, in its chronic state.— All the usual means had been tried in this case and failed, the stomach very irritable, and the patient completely prostrated from Emesis, he advised that the patient should take a table spoon full of new milk every hour or two, he did so, and was completely relieved in a few days.— When the abdomen is sore, and much distitity, some stimulating liniament should be rubbed over the whole abdomen, or the effected part.— Laudanum in combination with this liniament will in some cases be beneficial, will relieve soreness and procure sleep.— Dr Cullen recommends Laudanum in this disease to allay irritability, this remedy should be cautiously given, no vestage of inflamation should be present when used, will increase the disease and defeat our object.— The patient is generally drouthy, cold water or cold drinks

of any kind are objectionable, tepid drinks prefferable, the temperature of the drinks, should be about the same as the body. —
Diet, nothing of difficult digestion or stimulating should be allowed, some bland nutrient food should be admitted, barely to support the system, the diet must be adapted to the irritibility of the stomach, that which is most likely to remain ~~as~~ is preferred in small quantities, milk is very good, little nutriment, and soothing to the patient. —
After the disease is cured, should be very cautious to avoid all exciting causes. —
Persons who have had this disease are more liable to have it again than at first, should avoid all causes, as cold, getting the feet wet, draughts of cold water, when heated from exercise should get cool gradually, not to expose themselves to the air, over distending the stomach &c - flannel should be worne next the skin, feet should be kept warm. —

When this disease terminates in suppuration and gangrene, propper remedies have not been used in the inflamatory state. - When it terminates in sup

puration, and an abcess is formed, may be known by the frequency of the pulse, with frequent cold shiverings, with exacerbations in the afternoon and at night, followed by night sweats, and other symtoms of hectic fever, this generally proves fatal unless the abcess should break or open in to the stomach, and the matter evacuated by vomiting.

Sanguine may be suspected, when the violence of the disease will not yield to proper remedies when diligently employed, Sanguine is known by the sudden remission of pain, the frequency of the pulse remaining, and at the same time he comes weak, accompanied with prostration of the system, death is the consequence, unless the vis medicatrix should come in as an agent.

There are some doubts whether this disease ever terminates into suppuration or not.—

When this disease is caused from any of the poisons, their antidotes should be given if in time; If produced by corrosive sublimate, albumen should be immediately given, (is a specific). If produced by arsenic give an emetic - If inflamation is produced Bloodletting the best remedy - Should give an emetic or bleed according to circumstances of the case, a purgative of castor Oil followed by some demulcent, as sugar and water, Lime or alkalie is very good auxiliary. — Arsenic has no antidote, Carbonate of Pottash, is said by some to be an antidote, but is not the case, If acetate of Lead be a cause Bleed, and give sulphate of magnesia. —

An

Inaugural Dissertation

On

Tetanus

Submitted to the examination of the Rt Revd James Kemp D.D. Provost

And The

Trustees and Faculty of Physick

of the

University of Maryland

for the Degree of

Doctor in Medicine

on the 2d day of April 1827

By

Henry W. Johnson

of

King George

Virginia

The writer when he resolved to make this Disease the subject of his inaugural essay was not aware of the extensive relation which it holds with many disorders of the Human Frame — nor was the difficulty of solving the question of its Pathology sufficiently impressed upon his mind at that time — He however upon a little more reflection and a reference to books treating profusely and particularly on the subject soon found it erroneous to consider it at all isolated or easily described — Its constitutional instead of local nature, its connection with other affections and apparent dependence upon them for its very existence — indeed the yellowness of the eyes and skin its pathognomic mark together join in making its pathology and curative means singular & precarious —

It will not therefore be expected that any important novelty shall be offered or that any useful addition shall be made to the stock of information already accumulated by the learned in the Profession — We hope rather to benefit ourselves by this slight investigation than to render a pretension to others who are better capable of discriminating our errors than of receiving pleasure from our performance —

The different kinds of Jaundice are characterized by different names and ~~and~~ symptoms. The Yellow Black and Green Jaundice are indicated by the colour of the skin and occasional evacuations. In the Icterus the faeces are generally whitened and of the colour and consistence of moistened clay of the whitish variety. Together with this the yellowness of the adnata of the eyes and golden hue of the whole surface of the body distinguish it from black & green jaundice and from every other disease. And here it may be remarked that it is not believed that the yellow dye under the cuticle of whatever shade is attributable to any other cause than the resorption or presence of bile in the fluids.

The black and green Jaundice are nearly connected in their degrees of virulence and have little to separate them in description but colour. From Icterus however their distinction is marked and evident. The great depression in the vital powers anxiety lowness of spirits leaden livid or yellow Green appearance on the surface with pale or occasionally dark coloured stools would discover much difference in degree at least if not in the real nature of the affections.

To the genus Icterus this piece is to be confined yet it is not improbable that the same treatment applies in all only modified from a view of the state of the nervous system — The Yellow Jaundice derives its name 'icterus' from what was said to have been the ancient manner of cure — A bird called Icterus — Golden Thrush — was looked upon and instantly the disease was transplanted from its original seat to the body of the bird — Though it has been thought to take its name from this Greek word yet others think, and perhaps more correctly for aught we know, that the Hebrew language is the better one to look to for it and have derived it from a word importing 'circumfusing or encompassing' as a participle or as a noun 'a Golden Diadem' — Hence Morbus Regius might have sprung or perchance more likely from a part of the treatment which consisted in exhilaration of the spirits by varied amusement — Other names have been given it such as Aurigo Arquatus &c —

The obstruction of the bile in its passage from the point of recernment to the Duodenum is considered to to be the proximate cause — An impeded flow is supposed to be produced by several opposite causes but we think they are reducible to 1st Inspiration —

or change in the nature of the bile and 2d Mechanical obstruction from causes existing in the liver itself or external to it — Those that have been enumerated and which may be considered as originating in ~~some~~ crystallization inspissation or some morbid change in the nature of the bile are: The presence of gallstones in some one or all of the ducts: cysticus Cholidochus and Hepaticus — the preternatural viscidity of the bile — the spasm of the gall ducts — the inflammation of the coats of the ducts — and that arising from passion of some kind which has been thought to merge in the spasmodic species or variety — Those which act as mechanical obstruents are produced by enlargement or distention of some of the neighbouring organs or of the liver itself — Most of those operating as from the latter may be fulness of the stomach Duodenum and lower intestines caused by large quantities of food recruments impossible to be digested or difficult of passage — These continuing hardened and impacted afford, an insuperable barrier to whatever is impelled after by the peristaltic action, and in the end great distention — The uterus rising and pressing upon all parts around on account of the growth of the fœtus is found to act in this manner — a removal of this cause of course

is not to be expected ~~while~~ pregnancy continues — such as proceed from the former or enlargement — may be enumerated — Organic change in the state of the liver (not of secretion but of the following step of its function) of the stomach and intestines, Spleen Pancreas, inding in increase of the size of the viscus and consequent pressure upon parts around — Together with those omental and Mesenteric Turgescence — But it may arise from causes external to the body such as leaning against a hard substance as a table in writing much, and such as a tight bandage around the hypochondriac region — We may refer the Hepatic species to an unnatural distention of the vessels near the Pori Biliarii thus causing a reflux or resorption of the Bile into the system — The inflammatory action of the vessels is with us believed to be nothing less than debility followed by an increase of capacity and quantity of fluid — In protracted inflammation the number of vessels may also be encreased but the former is the first step toward chronic enlargement —

Before making further allusion to the species which are included under our two heads of Chemico-animal change and Mechanical obstruction, it may not be amiss to transcribe some or most

of the causes of fevers related in a periodical paper lately published. They are peculiar to the Author only in name and definite in application. An enumeration simply: 1. Circumfusa, 2. Applicata 3. Gesta, 4 Percepta, 5. Ingesta, 6. Excreta.

Among the Circumfusa we find sudden and great atmospherical vicissitudes. Dampness of the Air. Exhalations from animal and vegetable substances in a state of putrefaction & certain gases produced during chemical processes.

The Applicata. Damp clothes too long applied to the body, sleeping on damp ground or on any cold and damp substance. A shower of rain. or a cold bath.

The Gesta. sudden changes from exercise to repose excessive fatigue of body or Mind particularly at night.

The Percepta. Powerful Emotions or Passions of the mind. especially Terror fear Grief (Anxiety) and the reverse Anger Hatred. The Ingesta. Irregularity in Regimen. too great. an indulgence in fermented or Alcoholic liquors, spices. aliments of bad quality, unripe fruits. worms &c. Excreta. Derangement of habitual excretions. suppressed or excessive. Perspiration Eruption, Habitual hæmorrhage.

Concerning the action of these causes on the different tissues and the translation as well as periodicity of irritation

irritation nothing is said because little is understood
But with regard to the influence of these causes
over the vital powers and the effect over the
secretions particularly over those of the stomach &
intestines I would only say that inasmuch as
they have influence in this manner to the Affec-
tion of the liver I have thought proper to intro-
duce them. The connection between the alimentary
canal and the Constitution viscera is only to be
doubted by those who deny their having any
thing to do with each other in the way of Digestion
or further propulsion of worthless matter. If the
theory of Sir E. Home, which I believe that the
bile combines with a part of the fæces matter
of the large intestines to form fat that is ab-
sorbed into the system, were known to be correct
all doubts of course would cease. The intimate
relation between the liver and intestines would then
be established in one point of view at least.
But the action of the one upon the other, that in-
comprehensible dependence of some organs upon
others subserving the same purposes in the Ani-
mal Economy is not to be explained by
secondary effects. All causes that are considered
primary (if there be really more than One) are

thought to be productive of various effects - It's sympathy then or to avoid the obnoxious term we would say that it is the vital power residing in the nervous system acting by means of the connecting links of the nerves through the brain that stimulates the parts to simultaneous successive or morbid action in both or singly - We know ~~that~~ the opposite of the opinion that the stomach when excited invites the presence of bile - Neither do we assert that the stomach or intestines being so affected in a moderate degree in health might not have the same carried to excess in disease so as either greatly to suspend the secretion or change its nature - We are not disposed however to agitate the question whether the bile be naturally present in the blood and therefore would not dwell upon secretion using it might involve a difficulty - The explanation of colour cause of in Jaundice and in some other states of the body or a part would only in that case be more readily given -

But the reabsorption subsequent to an obstipating cause is more generally admitted and has more arguments in its favour - The approximation of particles which go to the composition of bile in the minute

vessels of the liver; their combination from being brought within the sphere of attraction belonging to each; their secretion in the form of bilious matter through the pinnulli into a follicle or some part which must have connection with lymphatic or venous capillary vessels; their absorption by or continuation in their course to the Pori Biliaris and their propulsion or passage into the Hepatic duct: are the different steps of Organic Function. The question is in what manner this function may be interrupted and in order to be explicit and concise in our answer we say that it is a cause operating in a general way upon the nervous system subsequently affecting the weaker or more liable part which may in this case be the stomach and by consequence the liver — This cause having produced its effect a lesion of the vital power in general and a still lower depression of its activity in the weaker part is not necessarily continued in its application for the continuance of the diseased local affection — But having brought about the effect a local disease which the state of the system and its part has made most subject, may depart giving room for the unimpeded action of the living power or restorative means of nature and for the

intervention of Medicine — It is known notwithstanding that the living power under this state of irritation may incline towards another extreme unless opposed by the Physician — Among the causes operating in this general manner are the circumfusa or atmospherical vicissitude, dampness, animal vegetable and (chemical) decomposition, the Applicata and Percepta — All of these have an oppressive effect. But combined with the Ingesta are more apt to affect the internal parts particularly the stomach and intestines — Then we will say; that as the alimentary canal may be esteemed the prime mover in this morbid process it causes by some means a cessation of the usual flow of bile into its parietes. & That by an affection of the powers of the system in general combined with the effect of natural and demand connection of those parts a change of secretion and secreted fluid takes place — Among those causes of obstruction that have been enumerated as mechanical is one called with is Hepatic as derivable from the species of that name & Whether nature makes use of such means of suspension there can be no determination — The theory of a Physiologist which (so far as understood) is, that inflammation of the stomach accompanied with the

same in the jejunum causes a contraction of the coats of the Duodenum and the impeded flow of the biliary fluid may accumulate to some for the absorption in some instances—

The presence of bile in the sanguiferous system after a debilitating cause and its continuance there for so long a time succeeding that appearance of the operation of the offending power whether general or local or both, is with no account for in one of two ways— Either the system is accustomed to its action and therefore not affected continues in a state of health from the natural presence of bile in the fluids— or the Hepatic bile which is known not to be very acrid but often the reverse being reabsorped and taken into the circulation continues after the impediment to its usual passage is removed in the same situation, from a partial change in its nature opposing the healthy motion groups— But though against this last it may be alleged that it should be thrown off as effete matter yet considering it as mild in its nature and differing but little in its constitution from the blood itself it is not revolting to suppose it capable of remaining without injurious action— When it is known that the colouring is not the

active part of the bile may per on that score might be laid aside— The redness and yellowness of the blood and bile are believed to be but different states of oxydation of the same metal; From the small quantity of white and its state of envelopement in a blanden substance preclude all idea of detriment— And if the urine be not indicated by the common sensible qualities is it not fair to infer that it is not resin exactly in the Hepatic which is to be found in the cystic bile?

A concentration of a different substance in a fluid passing along the Hepatic Duct has been supposed to take place in the Gall-bladder— But as changes of matter in a state of health are constantly going on in the body and in disease often from perfect innocuousness to the greatest acrimony— as the urine frequently seems disposed to form calculi of widely different natures according to human Judgment or to become sweet as in Diabetes with a suspension of mucal mention— May we not imagine with some appearance of correctness that it is a concentration of the elements of a more acid fluid. The promptitude of decomposition and combination cannot be better illustrated than by a reference to the chemical groups of respiration— What is considered

passiveness of the lungs themselves cannot be divested of the protection of the vital power. And it is that power the influence of which pervades every part of the human frame and causes the immediate disbursement and reception of that which is injurious or useful. Yet acting under a morbid impression or an uncommon degree of excitement from external causes it is incapable of those functions, an ability to perform which has been naturally conferred. As has been before stated the secretions are changed.

The Deleterious quality of the bile is attributed to nothing less than the formation of a new substance. The dark the green the yellow which is the most natural, the fluid and the concrete, the crystallized and uncrystallized may be forms produced by the sudden or longcontinued mutation of atoms as well as of constituents. This change may be brought about by irregular or preternatural nervous influence in the secretion or subsequently in every step of organic function. This vital energy acting under the morbid law may effect alternate or simultaneous excitement with the alimentary passages, so as to produce and increase or diminution in the secretion an inspissation and other forms of concretion in the substance of the liver or acini, in the pori Biliarii

and larger ducts - A manifest regularity of form which gallstones are found to exhibit and received ideas of the time of crystallization and solution would cause us to doubt perhaps this position or what might hence be inferred - But are we to govern the body by laws received from the course of attraction in dead matter? How are we to elucidate the principle of the incessant motion of the Heart? From any received opinions or observations upon inanimate nature? We say that it results from that law which runs to govern the whole body a law of periodicity, of action rest recovery, of action &c But this is only saying that, that is which is - We may advert to electricity if we well and compare it with the power of life - comparison they say is the groundwork of knowledge - Then where is the man that will make as clear as meridian day to us the origin or formation of those stones that are known to descend from the upper regions of the atmosphere? You will say from some eccentric planet - But is that proved - It is not, I believe, said that meteors are always near the earth when these stones fall - And if not - nor, perhaps the philosopher would not feel compelled to refer to them as the last resource of imagination.

Upon the whole we may say that the secondary cause of absorption of bile into the sanguiferous system is Inspissation more or less in some part of its course to the Duodenum: and that the primary cause of above of injury to the nervous system during its long stay there in some cases is its almost homogeneous nature with the blood with which it is mingled—

There are cases still in which it seems to have a tendency to produce great drowsiness—and at this when the same is attended with much pressure upon the skin and occasional propensity to eruption—

In respect to these it is thought that there is that combination of morbid appetite of the stomach before alluded to and that the bile there or in the duodenum meeting with imperfectly digested matter acid or alkaline forms compound with which are supposed to act as poisons— These poisons being somewhat assimilated to a few of vegetable and animated nature, cause an itchiness and cutaneous eruption which sometimes follow their administration—

Pain in this disease is sometimes excessive but it can hardly be supposed that it is ever owing to their passage through the gallduct of those very large concretions or crystallized masses that are found to block them away out by the natural outlet of the intestines—

as Remedies in this affection Narcotics, Emetics, and purgatives the warm bath and the lancet are made use of at the call of immediate necessity — Bloodletting preceding as it mostly does in painful and feverous diseases may be followed by a narcotic or an emetic — of this last class the first Antimony which may be administered in preference to Ipecacuana as the effect is more permanent — Purgatives, as the next step, are very useful in opposing the constipation which is a coincident of this disease — The oil of Turpentine has been found useful in cases of improper or excessive secretion from the liver and might here afford relief as well from its chemical qualities as from its stimulant action — It is also useful in the former respect, we believe, from its being more readily absorbed and thereby exciting other secretions which are in a torpid state from the noxious general cause — But before using alteratives and tonics in this it may be better to remove the invalid to purer and drier air, to regulate the diet and clothing & to prevent inordinate passion by change of scene and subject if possible — Mercury seems to be that which has met with most general and deserved approbation — It is therefore used with very great success in some instances — But it is not believed that it will render essential service in those complications of this disease where the vital power is greatly depressed, inasmuch as this remedy has different actions some of which are calculated to exhaust rather than invigorate — The Oxymuriatic acid bath externally and Muriatic acid internally we have been induced to think might act beneficially —

(No. 3)

54

Ded 1, 2, 3, 4, 6, 7, 8, 9, 10

Quadam

de

Scriptis et ratione scribendi

Jacobi Gregory Medicinæ Doctoris,

sive

Tentamen Inaugurale

quod

Revd. Episcop. Kemp D.D. Præfecti; et Rectorum;

nec non

Facultatis Medicinæ in Marylandiæ Universitate

Pro gradu Doctoris

Eruditorum examini subjicit

[redacted]

Virginiensis.

Henry M. Dowling

ffidens animi hanc rem aggredior; namque bene scio meas vires eam actare, ut vellem, non sufficere"

Ad diem XIX Martii, hora locoque solitis. 1827.

O Viro eximio
Joanni E. Cooke M. D.
artem salutiferam
apud Winchester
in Virginiense
feliciter exercenti,
quo duce
prima medicinæ elementa addidicit,
hoc tentamen
studiorum primitias
grati animi indicium
dedicat consecratque
auctor.

Inter hominum culpas nulla est pro qua plus reprehensionis merentur, quam meriti doctorum incuria.—

Quodsi scrutamur historiæ paginas inveniemus hanc culpam non hærere cum exceptione ævo præsenti:- Quamprimum animus humanus liberabatur erroris dominatione, atque homo sententias felicitatis formare coperat, las conjungendo culturæ mentis, crimen apparuit, attenuans cursus ardorem, et postremis ejus spei fundamenta evertens.

Dum una hominum pars ad sumptum valetudinis divitiarumque scientiæ in agris conabatur pro adjumento literarum et commodo societatis communi, altera videbatur obligationis insensilis atque sacrificii omnino secura:- Ac si illi portasse quam fortunatissimi erant ut suis laudibus circumscriptis æqualium eorum, minores spoliabant fulgori nomina, aut oblivioni tradebant.

Hujus de facti causa mirabilis, non idem animus omnibus auctoribus. — Nonnulli eam philautiæ attribuere, alii ignorantiæ effectum esse putaverunt: sed quicquid causa possit, tantum scimus quod ejus impulsu vires franguntur animi, progressusque scientiæ impeditur. —

Pro veritate habens ut una sive altera causarum supra dictarum vera est, vis ejus profecto recognosci non debuerit ad etatem eximiam hanc mundi. — In cognitione quidem hominum progressum valde parvum fecerint, quorum res gestæ gubernantur opinionibus inscientia superstitionesque ortis seculorum superiorum.

Quodsi non verum omninò sit ut homines his diebus pigri sunt præbendo merito doctorum munus quod debitum esse omnes agnoscant, saltem cum persolvendo negligentiam ostendunt quæ reprehensione dignissima est: — In hujus confirmatione, nos sine ambagibus, rogaremus — ubi est Newtonus, Bacon, Leibnitzius, ista lumina præstantissima seculi septimi decimi? — solum responsum quod nobis dent hom-

-ines, est —— moriuntur; — ac superdicèrimus, opera eorum secuta sunt, si non ad tumulum, attamen in ejus silentio participant.

Principia, et Novum Organum, nomina sànta olim in literarum regno, jam nunc in catalogo librorum nunquam nostrorum apparent: videtur tanquam Genius aliquis invisibilis prætereundo ejus pennam in aquas Lethæ immerserat, eamque apposuerat in eorum interitu.

Tempus est quòd homines se exuerint infamiâ quæ dignitatis valdè plurimum aufert, et in secula ventura videatur ut veterum incommoda non tam profundè inscripta in animis sunt, uti judicia in ditione tenere. —

Hæc notationes pro prælusione ad libelli introductionem designatæ sunt qui neglectus in nostro arbitrio immeritò est, et quèm nunc studiosis literaturæ concinnæ commendare petimus. —

Conspectus Medicinæ Theoreticæ Jacobi Gregory M. D. est opusculum ad quod referemus: Hujus viri in orbe medicorum fama quàm benè nota est, ut hic inutilis esset ejus laudem aggredi. —

De

- De nostra notitia exiguissima Doctoris nomi-
-inis scriptorumque dicere extimulamur quòd
ejus Conspectus sat meriti habet à tenebris
eum recuperare, di riti astimetur: atque qui-
-dem nobis persuasissimum est, ut di permis-
-us erit investigationi aquò et probò, vera
excellentia ejus undebitum, ac ista observantia
qua debita est retineri non poterit.-

Conspectus quòd anticipàtum dit jampridem,
in Latina lingua est.- Quæ rationes auctoris
erant òb hunc sermonem pro vernaculo coop-
-tandum in ejus libri scriptione, pars altera
nostra charta monstrabit.-

Ut vero opusculum propter caritatem perve-
-nire arduum posit apud multos qui forsitàn
curiositatem haberent eùm videre, et quòd aspi-
-ramur imaginationem astimare sententias
ejus pulchèrimas quò minùs probabiliter
à descriptione quàm visu, excerptorum par-
-pauculissima offeremus:— Hæc, quamvis sine
discrimine lecta, in exempla omnis opusculi
sant, atque non dubitamus ut ista in sapi-
-entum judicio omninò facient auctorem
apparere eruditum et latina lingua nos-
-centem.

Nonsemper est quòd cogitationes maximæ ingenium perculiunt cum vi maximâ: una parva si luculenter dicta sit nonnunquam hoc effectum habebit. — Quis legat hominis descriptionem quæ sequitur, sim aliquatenus sensu veritatis hujus?

"Sed ipse terrarum, et quæ eas incolunt, animalium, dominus, parvus, debilis, fatuus, omnium rerum inops, nascitur: sola parentum cura, diu conservatur, fovetur, alitur: paulatim crescit, pubescit, adolescit, sapit: forma, et animi et corporis viribus, parentes æquat; eadem gaudet exercere munera: tandem, ingravescentibus annis, communem sortem subiturus."

In hac sententiola venusta, verba propriè accommodata ad sensum videntur: nobis oblata est ante oculos tota natura physica hominis in uno versiculo: nascitur ille, dominus terrarum, parvus, debilis, fatuus, et omnium rerum egens: quòd proficimus, mens motu constanti cunctique pertur per gradationes singulares pueritiæ, adolescentiæ, et pubertatis, sit sentiri possit in auctoris sermone verbum unumquodque cum emphasi indicat. —

- At vero quum venimus in eum statum proprium vitæ quando homo in virium usu lætari videtur, animus verbis disertis scriptoris ad ejus mortem impellitur: — sic apparet, sententia tota constructa quàm feliciter est, quod vox ac sensus utrique in unum consentientes depingunt fortius vitæ brevitatem, et celeritatem temporis.

Loco alio, pòst descripserat quàm valetudinis varietates cæli actione, vitæ genere, et vi consuetudinis, auctor Conspectûs definitionem quæ sequitur dat hominis sanitatis perfectissimæ. —

"Scire tamen juvabit, perfectissimam florentis ætatis homini contingere sanitatem, cui mens sana, optimum Dei donum, data est, qualis non modo ad solita vitæ munera sufficiat, sed variis quoque casibus et studiis et negotiis facile se accommodet; quæ probe sentiens, et perspicax, et tenax, et percipit, et intelligit, et retinet, ut decet; quæ firma et serena, sive gravior fuerit sive hilarior, suique semper compos, neque suis inordinatis motibus, neque externis casibus, ludibrio est; sed propriis affectibus imperat, non paret, rebusque secundis modeste fruitur, adversas fortiter tolerat, et

- gravoribus, siqui acciderint, casibus, excitatur, non convellitur."

In sententia jam nunc exposita, auctoris vires discriminis perspicuè apparent; non duntaxat ab idoneâ verborum elasicorum et convenientium selectione, sed quoque ab ratione elegantî quâ ideam ejus exponat.

Scribendo librum, Doctor Gregory ejus dictionem formasse videtur in modum Ciceronis: namque â mentione frequenti ille nominis quidem facit, constat hunc auctorem magnum attentè legerat, et cum ingenii multo acumine; atque in Conspectu nisus fuerat ejus versùs quam maximè assimilare ad sermonem exemplaris: Quare quemadmodum hanc rem gesit, persolvere est philologi.

Rationes propter quas Doctor sermonem Latinum pro vernaculo intendebat, digna certè sunt homine literarum erudito.

Ille ipse in ejus libri præfatione dicit, hanc nobilem et utilissimam linguam nimis negligi ipsi viderè, eo pejore cum effectu, quod per tricentos ferè annos postquam literæ

-humaniores, et cum iis scientia peri omnes, in Europa reviviscerent, communis doctorum virorum lingua fuisset, per totum terrarum orbem intellecta, qua inventorum omnium, et observationum, quotquot sciri aut propagari mererentur, facillimum et commodissimum per omnes qua scientiam colerent gentes commercium fieret: — Patria, Latino sermone tam male in desuetudinem abeunte, non modo nova in omni genere scientiæ inventa tardius pervulgantur, vel penitus cohibentur intra fines regionis ubi primo nata sunt, verum etiam multi et æstimabiles auctores, præsertim antiquiores, qui hoc sermone usi erant, immerito neglecti, aut raro volventur, aut in caliganibus bibliothecis reposti, duro somno damnantur, digni meliore fato: —

Ades sub conditiones has omnes fit obligatio, et lector classicus coercetur aliquid tributi restitutori latinitatis veteris reddere: — ac si in cogitationibus seriis de futuro spem foveret unquam hunc sermonem adhibendi in scriptione tentaminis cujusquam literarii sive ad mores pertinentis, oportet eum

-ùt res momenti maximi ejus dies et noctes dare lec-
-tioni Conspectûs Gregory'. —

Uti opus est comparatè novum, atque ab auctoritate veniens quantùm tantùm Professor recens Medicinæ Practicæ in Edinburgi Academia, rationes duæ potentissimæ incitarent in medicinæ studium incumbentes eum legere; cog-
-nitio eorum linguæ augebitur, et quoque profes-
-ionis: Quòd demùm Conspectus inchoatus erat quò magis speciatim eis Doctoris ipsius verbis apparebit. —

"Nec unquam mihi in voto fuisse, medicos jam multa doctrina et longa experientia eruditos docere, sed juvenes tantum ad Medicinæ studium incumbentes, scientiæ nos-
-træ principiis imbuere."

Cæterum post omnia quæ hìc relata sunt pro opere, forsàn dicatur — si hic liber ullum meriti permagni habet, quare versionem Brittani-
-cam non recipit? — ad hoc responderemus, ratio-
-nem quæ ejus versionèm favet, eandem eam im-
-periosè abnegare: in mortis cubilè, auctor com-
-probationem sapientum paucorum anteponens laudibus inanibus multitudinis, et splendori qui

- promulgationem Conspectûs Medicinæ Theoreticæ comitabetur, obsecrabat eum nonunquam interpretari: sic ex veneratione propter hominem, obsecrationi ejus posteri adhærent.

Ad Profesores Marylandicæ Universitatis:

Viri Illustres,

Jam nunc operam exegi quam hujus academiæ præscripta in medicinæ studium incumbente postulant priusquam ad gradum admissus sit.

Argumentum ut videbitur, novum est: ejus novitas ratio præcipua erat quæ me adigebat pro tentamine meo inaugurali id deligere. Defectuum ejus multorum non sum insciius; sed quum in memoria habetur quantulum datur temporis in ejus præparationem, et quot molestiarum necessariò comitantur, animor sperare eam inspectionem benignam habere.

Denique, Viri Illustres, sinite me vobis gratias agere ob præcepta tuis prælectionibus deducta, et mea vota sincera apponere in valetudinem, prosperitatem, et felicitatem singuli vestrum.

An
Inaugural Dissertation
on
Nephritis.

Submitted to the examination of the
Right Revd James Kemp D. D.
Provost
The trustees and medical Professors of the
University of Maryland
for the degree of
Doctor of Medicine
on the 15th March 1827

by

Alexr Dugas
of
Augusta Georgia.

To

John Dent M.D.

of

Augusta, Georgia.

This Dissertation

is respectfully inscribed

as a public testimony of respect and esteem

by

his sincere friend

and pupil

The author.

Nephritis.

This disease is located by Dr Cullen in the Class Pyrexia and order Phlegmasiæ of his Nosology. = Nephritis properly considered has been divided into two Kinds: The Idiopathic, arising from the general causes of inflammatory affections, is situated principally in the external coat of the Kidney. The second variety, most usually dependant on the Stimulus of Calculi, or a metastasis of Gout, has very justly been denominated Symptomatic, and occupies the internal portions of the organ. = The object of this treatise is to take cognizance solely of the first of these forms, as any notice of the second, would necessarily lead us farther than our proposed limits would permit.

The Symptoms which will generally enable us to recognize the existence of Acute Idiopathic Nephritis, are Pyrexia, a sharp or acute pain in the side corresponding to the affected organ, which extends along the course of the ureter. The patient experiences more or less

uneasiness on walking or merely remaining in an erect posture; and enjoys most comfort when lying on the side in which the disease exists. There is, not unfrequently, absence of fullness or numbness of the thigh and leg of that side, as well as a retraction of the testicle. = The frequent desire to pass urine, and the difficulty with which this is effected become sources of continual and serious annoyance. The urine, which can often be voided but by drops or by a small and interrupted stream, is found more or less altered in appearance, being frequently of a deep red colour, and often with an admixture of mucus or blood. Dr Potter observes that the colour of the urine becomes darker as the inflammation increases through, according to Dr Cullen, in very aggravated cases, it usually becomes nearly colourless.

Leaving the urinary apparatus and turning our attention to organs which would seem at first view to have no connection with the Kidneys, we immediately find the strong and pervading influence of Sympathy, displayed in an eminent degree in the Stomach, and to some extent in the Intestines. Accordingly among some of the most prominent accompaniments of Nephritis we find Nausea and Vomiting. The Stomach is sometimes so much affected as to evince its dominion

over the circulating system, by diminishing very materially the usual fullness and force of the pulse. = The bowells, though usually costive, are sometimes affected with Diarrhœa; and colicky pains are not unfrequent attendants. = The Skin also indicates the state of the system, being dry, hot, and sometimes rough. = The tongue is very generally white, but occasionally much furred.

Among the Causes of this disease, may be enumerated all those which give rise to inflammation in any other part of the system. There is, in some habits, an evident predisposition to Nephritis, and in these we see the most trivial circumstances, giving origin to most violent attacks of the disease. This predisposition is sometimes so well marked that our very able and discerning professor of Practice, asserts that he has known very violent inflammation of the kidneys produced by eating a bit of pickle, a little cabbage, Turnips &c. in short, by the use of any acrid ingesta or acid fruits may produce it. = The same may be said of the use of Diuretics, which the majority of patients will bear to any extent, with impunity, although in some individuals the slightest use of any of the articles of this class, would be attended with the most serious consequences. = Nephritis may be produced by violent and long

continued exercise on foot or on horseback; by sudde strains; blows in the lumbar region; &c. &c. A collection of indurated faces in the colon, is said to have produced it. = The immoderate use of ardent Spirits, will sometimes occasion it, in persons of a plethoric habit.

Nephritis may terminate either in resolution, Suppuration, or, in some very rare instances, in Gangrene. It has also been said to leave the Kidney in a State of Schirrous enlargement and induration. = The course of this inflammation is very similar to that of the other members of its order. If the Symptoms have been mild and properly treated, we need not fear any serious evil. But if on the contrary they have been highly inflammatory and continue with unabated violence for seven or eight days, we have ample reason to apprehend Suppuration. It is true that by energetic treatment, instances of a termination by resolution, have been known so late as the fourteenth day of the disease. = If it eventuates in resolution, this is made evident by a subsidence of the fever, and gradually of all the indications of disease.

The formation of pus is marked, as in other instances of a similar nature, by a remission of the <u>acute</u> pain, which is changed into a kind of dull or heavy throbbing sensation about the Kidney. The patient experiences

rigours or alternate paroxysms of heat and cold; passes pus per urethram, and finally becomes a prey to hectic fever, which puts a limit to his existence, sooner or later, according to the strength of his constitution. = But few survive this state of things more than a few weeks, though there are many cases on record of their having lingered as long as twelve or eighteen months. = Dr Baillie observes, that in no other gland are abscesses so apt to form as in the kidneys; = he appears, however, to think this tendency to suppuration, dependant, in a majority of cases, on a Scrophulous Diathesis

In those rare cases in which Gangrene supervenes, there is a sudden cessation of pain after the unsuccessful use of remedies. The pulse is then observed to sink rapidly; cold sweats make their appearance, and the cadaverous aspect of the patient's countenance, as well as the other ordinary symptoms of Gangrene, clearly evince the approaching dissolution with which the patient is threatened.

As a general rule, we may observe, that the fever being slight and not of long continuance, but yielding readily to our remedies, a pretty free and easy discharge of urine; universal diaphoresis; &c are to be considered as predicating a happy issue. = A flow of blood from the hæmorrhoidal vessels, has been considered a very favourable symptom. =

The indications which shoulds lead us to form a conclusion but too unfortunate for our patient, are, a great paucity of urine, which is evacuated with much difficulty, and is either nearly colourless or of a very dark hue; - The sudden suspension of pain; troublesome hiccup; and Delirium. But cold extremities, severe and repeated rigours, succeeded by a hectic condition of the system, are perhaps always to be considered the forerunners of death.

The affection of which we are treating, may be distinguished from that produced by the presence of calculi in the Kidney or ureter, by the fever supervening very soon after the first painful sensation, and continuing without any very marked intermission, during the whole course of the disease; whereas if there be calculi present, there is no symptom of fever until a lapse of some considerable time after a pretty sudden attack of very violent pain.

Nephritis may be distinguished from Rheumatism, by the pain not being materially increased on motion; by its extending along the course of the ureters; and lastly, by the nausea and vomiting which so often characterize this disease. In Nephritis, the seat of disease may in general be discovered by pressure over the region of

the kidneys, and by the existence of Dysuria and micturition.

We may draw the line of distinction between inflammation of the kidneys and common colic, by observing that in the former, the pain is not only situated in a part not assailed by the latter, but is also accompanied by fever, and an evident change in the secretion of urine. = Although some have mistaken this inflammation for that of the stomach, the symptoms are usually so well marked, and many of them so different from those of Enteritis, as not to leave the least doubt in the mind of any enquiring practitioner, with regard to the true nature of the case.

Post mortem examinations of persons who have fallen victims to this disease, evince the ravages usually consequent on the existence of active inflammations: We find the kidney the seat of large abscesses filled with fœtid pus; or perhaps the greater part of it has been wasted away. It is occasionally found in a state of great schirrous enlargement. Marks of inflammation have been traced along the course of the ureter and even in the bladder.

It must be obvious, from the history of this disease, that our principal reliance is to be placed in the free and prompt use of the lancet, and of all the Antiphlogistic remedies under our controul. Hence as

soon as we are called, and recognize the existence of Nephritis; we are to draw as much blood from the arm, as the condition, age, &c of the patient will admit. This is to be repeated as often as the pulse is found to acquire its morbid fullness and strength. The institution of general depletion should not permit us to neglect the manifest advantages to be derived from the application of leeches or cups over the region of the affected Kidney. I am not unaware that this remedy is incompatible with our anatomical knowledge; but as it is in just accordance with daily experience, (which is certainly our safest guide), a neglect of it would be highly reprehensible. To these cardinal remedies, should be added others, which, though but adjuvants, are of much real importance. The patient should drink largely of mild mucilaginous and diluent fluids, such as flaxseed tea, Barley or Gum water, Marsh mallow tea, &c Dr Potter speaks highly of large draughts of ice water, as inducing nausea and diaphoresis. The addition of diuretic substances to these, has been deemed prejudicial, as tending more or less, to irritate the Kidneys. The pain of the loins and troublesome micturition & dysuria, will often be relieved by warm fomentations over those regions.

Costiveness should never be suffered to exist, but be obviated by mild cathartics, as the neutral salts, castor oil, manna, &c. Dr. Potter recommends a strong purge, early in the disease, and gives calomel the preference. = Emollient Clysters often repeated, will in many cases be sufficient to prevent a recurrence of costiveness, and are always highly serviceable in allaying irritation. When the violence of the inflammatory symptoms shall have been sufficiently reduced, the addition of a little laudanum to them will much assist their calming effects.

Mild and unirritating diaphoretics, nauseating doses of tartarized Antimony, &c as also the warm bath, become remedies of much value, after the violence of the disease has been mitigated by the more energetic means. = If Opiates are ever admissible, it can only be in the latter stages of the disease, and even then, much caution is necessary in their administration.

It may be doubted whether Blisters are to be enumerated as useful articles in the cure of Nephritis. The many instances of Strangury produced by their application, can scarcely leave any doubt respecting their immediate action on the Kidneys. I will merely state that their use is recommended by Dr. Potter, and condemned by Dr. Cullen & other authors of note. =

If, notwithstanding all our efforts, Suppuration ensues, it is, as I have before observed, to be considered a hopeless case. = We can, however, alleviate the misfortunes of our patient, and at the same time neglect the use of no remedy which affords the least prospect of success. = Dr Baillie tells us to try the use of "a seton ~~introduced~~ inserted in the loins, or in the flanks of that side where the diseased Kidney is situated." - All the Balsamics have been prescribed with more or less advantage. = The continued use of the preparations of Iron, of Chalybeate Waters, &c are entitled to much attention. The Peruvian bark may be of service. = Sea voyages and a change to a colder climate, are thought by some, very advantageous. = In short, all the remedies recommended for the removal of the hectic tendancy, and the restoration of vigour, are to be put in force.

Those who, from a peculiarity of habit, or from having formerly experienced an attack of Nephritis, are liable to have a return of it, should be very careful to avoid all exposures to cold or sudden changes of temperature. Their feet should always be well protected from humidity. = Sleeping on a hard mattress or boards is strongly recommended. = The diet should be moderate, and no stimulating beverages can be indulged in with impunity

The end.

An Inaugural Dissertation,

on

Cholera Infantum,

Submitted to the examination of

the Right Revd. James Kemp D.D. Provost,

The Trustees and,

Medical Faculty of the,

University of Maryland,

For the degree of Doctor of Medicine,

on the 2nd day of April A.D. 1827.

By Edward A Rouzee,

of

Hanover County,

Virginia.

Cholera Infantum

This disease was not noticed in our country until about 40 years since and then only prevailed in our large cities; It is now not the case for it is to be met with in the practice of almost every village or country practitioner. This disease generally prevails from about the last of May until the last of August, it disappears with the appearance of cold mornings and evenings. This disease is much dreaded & yet its fatality may for the most part be attributed to want of cleanliness and the impracticability of a removal from the atmosphere in which it was produced hence it is most fatal and occurs chiefly among the poorer class, in filthy and badly ventilated apartments; persons living on newly settled and well shaded farms are generally exempt from this disease, while it is apt to occur when a new part of country, whether covered with vegetation or not,

exposed to a hot sun especially when the weather is calm.
Dr. Rush supposed this disease to arise from Marsh Effluv-
ia, but this is incorrect as it is uniformly seen to result
most from the solution of Marsh Effluvia, Heat
the remote cause a sudden suppression of perspiration
will produce it. Children are most subject to this disease
after they are weaned owing to the aliment not being so
well proper for them as that furnished by nature, exposure
to rain during hot weather teething worms unusual
diet taken by the nurse as acids greens unripe fruits
common acids punch will excite the disease unripe fruit
and animal food favour the disease for this reason children
of French parentage are not so subject to the disease as
others, as they are not in the first place permitted to be exposed
much to the hot Sun they eat very little animal food

no unripe fruit and they wear flannel during the year
he remote cause (Heat) induces indirect debility and is most active
hen aided by moisture; an over distended Stomach favours its
tion. The excitability of the body is accumulated during the
inter heat acting upon it produces indirect debility & this
ives rise to disease, Heat produces a weakness of the liver
Stomach, these organs are the principal sufferers and
the first instance it may with propriety be called an Hepatic
ffection; the excitability is not reduced, more blood is
ent to the Liver consequently an increased secretion of
le, The Acid generated in the stomach is owing to debility
the acid unites with the bile and forms a green fluid —
ose who fall victims to the disease die from a general
prostration of the nervous system. Coma from congestion
nd also from extreme weakness takes place in this disease

generally appears in children during the 1st or 2d years but
metimes takes rise to the 4th or 5th — There are two diseases with
ch Cholera may be confounded Viz: Diarrhea and Dysentery they
incipally affect the intestines — but in Cholera the Stomach is
st influenced in the first stage of this disease the discharge
almost wholly bile — It generally commences with loss appetite
nclination to sleep with symtoms of debility. It comes on
th slightly increased discharges from the bowels which
metimes for some time but afterwards becomes more violent
d is attended with vomiting. This is seldom or never pre-
eded by a chill when this is the case the fever is inflamatory
ed when this runs high convulsions take place and often
minate in Hydrocephalus internus: The principle differences
— This disease arise from differences in predisposition, in some
find Coma from an inflamatory fever and in others we see it

ise from a great degree of debility both of which are frequently
companied by violent vomiting. The difference in the feeling
use will frequently produce a difference in the disease – in
me seasons we find it more inflamatory than others and in
ise seasons Hydrocephalus internus is most apt to take
ace Under these circumstances bloodletting is necessary and
emetics relieves the puking and purging effectually
some cases there is a slight remission in the morning in
ny the fever is scarcely to be observed In coma from inflamation
pulse is slow and full while from debility they are found
equent and quick – The abdomen is generally dry and hot
hile the rest of the body is not so we often find it hard
d very much swollen – a general operation is seldom seen
the disease until the patient begins to recover The
ensorium is sometimes affected in this disease hence Strabismus &c

he tongue sometimes becomes dry and brown sometimes it does
not change at all the matter ejected from the stomach is
sometimes bile while in others nothing but the natural secretion or
the matter taken into it unchanged is discharged - The alvine
evacuations are often belyous sometimes not so but quite
watery which is an unfavourable symptom The Child frequently
complains of a burning sensation about the anus - washing
the part with warm water or milk will relave it. The
bile is in some so acrid as to excoriate and cause a discharge
of blood. To prevent this disease we should avoid
filth of every kind the body should be daily washed with
or bathed in cold water as it imparts tone and removes
direct debility wearing flannel next the skin not only
the day but night also no aliment should be taken but
such as is easily digested the milk of the mother is best

nd next that of the Cow a little salted meat may be
ken at Ammer bread not two old. Crackers and Ship
ead, Tea and Coffee should be avoided unless very strong
is then a tonic It is advisable to keep the Child
the breast for 2 years but above all keep them out of
e sun and if practicable remove them to the country
a shady retreat This will not only prevent the
disease but frequently effectually cure it When this
disease becomes complicated with Pertussis it is
ery difficult to treat formerly Emetics were employed
all cases of Cholera but now purging are is
onsidered preferable the advantages consist in the
llerd state of the Liver & in great debility, A dose
f Ipecacuanha is useful when the stomach is

urloaded and is incapable of ejecting its contents
ery mild cases may be cured by common Cathartics
ere there is obstinate constipation an Enemita and
mall doses of Calomel may be useful Astringents and
nics of various sorts have been used The root
f the Rubus Villosus and Red oak bark are among
o best A compound of Calomel Opium & Rubarb
as been used: Opium is apt to affect the Sensorium
ocks up the Liver and produces constipation Bitters
re seldom useful for after the body is much
macerated They will not act Calomel & Opium combined
ave been highly recommended but Calomel alone
s much better Opium increases the local determination
d as I before said locks up the Liver & increases the torpid

The first object which presents itself to our view when
taking into consideration the cure of the disease is cleanliness
the body should be well washed with soap and moderately warm
water the linnen of the bed as well as that of the body
should be frequently changed flannel should be worn next
the skin cold water is injurious during the existence of the
disease but cold bathing as a constant practice is a preven-
tive Mercury is the only remedy that can be relied
on but not in such quantities as to Salivate much as
large doses are apt to produce a general prostration it
will also cause an irregularity of the bowels large
doses are proper when there is much fever. To a child
year old 1/2 a grain morning noon & night 2 years 1 grain
soon stops the coagulations and may always be given

a chronic state of the disease it may be com-

with Opium Calomel seldom produces salivation

children it is a common saying and probably a true

That Salivation cannot be produced before the

th appear and after they entirely disappear

An

Inaugural Dissertation

on Amaurosis

Submitted to the Examination

of the

Right Revd. James Kemp D.D.

Provost

The Trustees and

Medical Faculty

of the

University of Maryland

for the degree of

Doctor of Medicine

by

Jno. C. Dorsey

April 2nd = 1827

Amaurosis or Gutta Serena

Amaurosis is a diminution or an entire loss of sight, arising from paralysis of the retina, or of the optic nerve.

The disease is in general characterized by a large black pupil, and an immoveable iris, with a degree of strabismus; but the dilitation of the Pupil and the immobility of the iris, are not constant symptoms. There are cases on record where the amaurosis was complete and incurable, and yet the pupil dilated and contracted according to the degree of light to which it was exposed: and so far from a dilated and immoveable pupil being a constant attendant on Amaurosis, we sometimes find the pupil more contracted than ~~usual~~ natural, while on other occasions it has its usual appearance; although there is no doubt that in the most common forms of the disease, there is both dilitation and immobility. I know of no state of the Pupil which can point out the particular cause to

which the amaurosis may be imputed, but I believe it is always dilated in that species of the disease which arises from the application of narcotics.—

Amaurosis may be confounded with cataract—but in the latter disease, whenever the diminution of vision is considerable, the opacity of the chrystalline lens is distinctly seen; whereas in amaurosis the humours are transparent, & this is the case even when the disease is complete.—although the state of the pupil is no mark by which we can judge of the existence of amaurosis, I believe the presence of the disease may be pretty accurately determined, by the inanimate appearance of the eye; by the patient being unable to direct the eyes to any object, so as to place it in the axis of vision; by the rolling motion of the eye; and by the pupil being often not quite circular.—Conjoined with these marks, there is transparency of the humours; once the eye, if minutely examined, will be frequently found to exhibit a dead white or green appearance.—

Amaurosis may be attributed to a variety of causes, all of which act in two ways, either directly upon the optic nerve and retina, inducing organic derangement, or sympathetically so as to disturb the function — The disease sometimes comes slowly on, at other times it is sudden in its attacks — It is often preceded by intense pain in the head, accompanied by flashes of fire from the eye, both of which symptoms subside when the disease is established — The pain is sometimes confined to one part, but on other occasions, often as throughout the whole head — The patient complains of motes and insects floating before him, his sight is often considerably diminished before he is aware of it, and he discovers it only by a sort of chance. The German writers enumerate a number of assignable causes for this disease and point out the characterising marks of each species; but I am not aware that we can speak decisively on this point: and indeed in many cases, there is great difficulty in distinguishing between an organic and a sympathetic Amaurosis. —

The most palpable causes of amaurosis, are external injuries, pressure, over excitement, suppressed secretions, a change of structure, derangements of the gastric system, the deleterious influence of narcotic substances, & constitutional disease. When we reflect on these causes, and consider that amaurosis most frequently arises from the first four, we have strong reasons for pronouncing this affection to be in general incurable.—

The first cause which we have assigned as producing amaurosis, is external injury & this may operate in a variety of ways. Blows upon the head, from the disorganizing effects of concussion may give rise to it, or, by causing an immediate effusion of blood, may compress the optic nerve, so as to produce permanent blindness, although the patient may otherwise recover from the effects of the blow.— Amaurosis has not unfrequently been produced by lesions of the supra-orbitary nerve; & wounds may either suddenly destroy the continuity of the optic nerve

or be followed by inflamation which proves fatal to the structure — A remarkable instance of which is related by Heister, when in consequence of a musket ball transing the forehead, the man became instantly blind; and although he recovered from the wound the blindness continued.—

The second cause, pressure on the optic nerves, or the retina, is a very frequent origin of the disease, and may be either temporary or permanent. Temporary pressure is most frequently induced by an increased flow of blood to the head, as is exemplified in cases of difficult parturition, violent coughing, or excessive vomiting, all of which have occasionally produced amaurosis.— Indeed when there is a determination of blood to the head, even stooping to pick up any thing from the floor or to tie the shoes, will so far derange the function & disarrange the formations as to produce temporary blindness; & we shall feel no difficulty in accounting for this phenomenon, when we reflect upon the connection of the carotid arteries with the optic nerves— The nerves near their

junction lie close to the arteries, so that they must be compressed by any increased impulse in those vessels. But the most intractable cause of amaurosis is permanent pressure,- which has often been produced by hydrocephalus, by exostosis at the base of the cranium, and by tumours in the brain in the course of the optic nerves, instances are recorded by several authors.- The retina may be similarly compressed from the distention of the eye ball, as in hydrophthalmia, from a dilated state of the choroid vessels, or from serum effused under the choroid coat— a remarkable instance of which is taken notice of by some authors.—

The third cause of amaurosis enumerated is over excitement in the organ; since this is by no means an uncommon origin of the disease, People have been struck blind by lightning, & blindness is often produced by the eye being long directed to minute objects, or by its intense application especially during candle light. This is frequently the case with engravers & literary men. I have heard of a case where the mar-

of a printing office became blind - from connecting the press & close - my close reading -

A fourth cause to which we consider amaurosis referable, was a change of structure in the optic nerve, or its expansion. This change may be referable to inflamation on some occasions, in other cases we cannot account for it: but on dissection, the nerve has been found shrunk & much diminished in size; and sometimes the retina has been firm and thickened. —

Suppressed secretions has been named as a cause of amaurosis; and these are much dwelt upon by some writers among the Germans & other humoral pathologists of the continent, as a frequent origin of this disease - I know of no instance where amaurosis could be fairly imputed to this cause, although such, particularly suppression of the menses & the hemorrhoidal flux, be admitted by the surgeons of this country - If the suppression of of these discharges ever give rise to amaurosis, it must be by pro-

inducing plethora, or causing an increased determination to the head. Suppression of the menses is a common occurrence even in plethoric women, while amaurosis does not seem to be more frequent in women laboring under obstructed catamenia than in others. I am therefore not disposed to view suppressed secretions as a frequent cause of this disease. —

Derangements of the gastric system are frequently productive of amaurosis; in which case the disease is always a sympathetic affection; and this is the only species of this disease, which comparatively speaking is easily cured. It is difficult to say what states of the alimentary canal give rise to amaurosis, but it has been observed that worms & accumulations of bile have often produced it. —

Amaurosis may also be produced by the deleterious effects of narcotics. Narcotic vege-

states, and some other poisons, which generally
paralise the system, will act upon the optic
nerve & retina so as to produce blindness -
This is particularly the case with deadly night-
shade, henbane, tobacco, and Lead -
The last cause of amaurosis which we in-
numerated as depending upon a direct
affection of the immediate organ was congen-
ital disease - People have sometimes been
born blind; and upon examination, there has
not been found either closure of the pupils - o-
pacity of the cornea or of the humours - I am
unacquainted with any dissections of such
cases; but the presumption is, that the imper-
fection in them is either in the retinae or in the
optic nerve & perhaps one or the other or indeed
perhaps both of them may be wanting. It
is not probable there is any malconforma-
tion of the brain, because there is no deficie-
ency of intellect, or a part wont -
The causes which we have enumerated are the

most frequent, though not the sole cause of this disease. It is a disease by no means rare and is one of the most difficult to cure of any of which the eye is liable to be affected.

Treatment of Amaurosis

When amaurosis occurs in the decline of life, when the disease comes on slowly, when it has been of long continuance, and when complete but more especially when it is a congenital disease or can be traced to an organic affection, it is always incurable - As also when the amaurosis is not complete, & the patient is capable of perceiving the light, when the attack has been sudden, when of short duration, & more especially when it is periodical it is frequently cured - From the consideration of these circumstances, it becomes a primary object to endeavour to ascertain the origin of the disease; and although this cannot be always accomplished, yet on

may occasions the surgeon may be greatly assisted in forming a judgment from accompanying symptoms - Thus if the patient labours at the same time under hydrocephalus, if the amaurosis has been preceded by intense headache & there is a coexistant state of palsy, there will be but little reason to doubt that there is a permanent pressure and an incurable disease; whereas, if there has been previous marks of the determination of the blood to the head, such as head ache vertigo, & flushed countenance, attended with strong arterial action, it may be presumed that the function is only disturbed by temporary pressure; or if there have previously existed irregularities in the sanguine system such as dispepsia, or bilious attacks, we then have every reason that the amaurosis is sympathetic, or dependant on morbid actions of the system & therefore a manageable disease

Keeping these considerations in view, when the amaurosis is conceived to depend upon increased vascular action, we employ general and topical bloodletting, blisters to the temples, behind the ears, & to the neck & establish a continued discharge by means of a seton or issue ointment The head should be shaved, & the cold shower bath used every morning; the bowels excited powerfully, but not freely unloaded, by means of calomel combined with jalap, scammony or gamboge; and the patient placed upon a low diet. When the amaurosis proceeds from debility, in consequence of over excitement, as from a stroke of lightning or long continued exertions of the eye, after clearing the alimentary canal by vomiting and purging, we have recourse to blisters repeated by applied to the forehead, to electricity & to corroborants, such as bitters and the preparations of blisters Iron.

This is the species of the disease best ~~adapted~~ adapted

for electricity, but very frequently neither electricity nor blisters nor any other means is able to effect a cure. When the amaurosis is thought to arise from irregularities of the stomach and intestines, we exhibit repeated emetics, the best of which is a solution of tartrite of antimony, given in small doses at short intervals — We also purge, and after the alimentary canal has been well evacuated, we employ bark, bitters, and other corroborants to restore tone — These remedies must be long persevered in before we can expect any advantage from their use —

In tropical climates, when the eye is much exposed to the Sun, the retina is apt to become so debilitated, that vision is considerably impaired in the shade or a feeble light; hence the inhabitants of those countries are frequently seized with amaurosis through the night — This disease has been called

night blindness or Hemeralopia. It is more apt to attack strangers than the natives, and seems to depend upon debility in the nerve, induced by previous excitement from exposure to a strong glare of light. The disease occurs very frequently among sailors & soldiers in the E. & W. Indies. It is however not confined to these climates, as a similar state of the eye has been found in persons who have been much exposed to reflected light from the snow. It would also appear that, independantly of long continued exposure to the suns rays, or the glare of the snow, much fatigue predisposes to this temporary amaurosis; and hence it has been observed to prevail more frequently among the common men than the officers; and the peasantry of the country are more frequently attacked than the higher orders &c &c

The disease is slow in its approach;
vision is perfect during the days but about
sunset it is obscure; and as the night
advances, the patient becomes so blind
that he cannot distinguish one object
from another, except by moonlight or
by the light of a candle— He remains
in this state during the night, but gra-
dually recovers his sight as the sun ri-
ses in the morning— The sight continu-
ues perfect during the day but again
fails in the evening, and although in
the commencement of the disease, the
patient was capable of discerning objects
by moonlight or that of a candle, this
ability in a short time ceases and
the amaurosis becomes complete, from
the setting to the rising of the Sun—

This periodical amaurosis is some-

times cured spontaneously, more especially where the patient has been removed from the exciting cause. But as this cannot always be effected or when it fails of success, recourse must be had to remedies. As the state of the retina in night blindness is similar to that which exists in amaurosis, produced by lightning or by the long continued direction of the eye to minute objects, we adopt the same plan of treatment once more successfully because the disease is slighter in degree. This treatment as we have already suggested, consists in electricity and the repeated application of blisters to the temple and eyebrow while the bowels are well cleared out

by cathartics, after which the general tone should be restored by preperations iron, bitters & other corroborants

Jno. C. Dorsey
M.D.

ative process. When gangrenous spots do appear it is supposed by some Pathologists that the inflammation has extended to the Muscular Structure of the intestines. Doctor Potter says it is no longer a matter of Conjecture. All the membranes of the intestines sometimes Sphacelate. He also speaks of a case where he examined a man who died of Enteritis, without the aid of medicine, having been taken at Sea. In the Course of the Intestinal tube there were more than twenty gangrenous spots, the dead parts were pricked out with the fingers leaving entire apertures through all the Membranes of the Alimentary Canal.

Enteritis is liable to be mistaken for other

diseases that attack the intestines. namely the Cd
ic and it may also be Confound with affections of
the Kidnies probably from Calculus.

Enteritis may be the sequel of Colic and
this should ever be borne in mind, while engaged
in Establishing the diagnostic Signs between
the two diseases. Colic may be distinguished
from Enteritis from an absence of fever in the
former, by the pain occuring in paroxysms with
complete intervals of ease, and by the pain bei
ng alleviated rather than increased on pressure.
As it respects the disease of the Kidnies it is
attended with pain severe and Constant of the
whole abdomen, Costiveness, nausea, vomiting.
But the pulse is generally slow and pressure on

the abdomen does not aggrevate the pain.

The prognosis of this disease is unfavourable if it be not taken in time, but should we have acce ss to it at first it is under our Control; but if neglected for a day or two the mischeif is irrep airable some times.

The consequences of Enteritis are of a formi dable nature, agglutinations of the intestines, dro psy and tendency to a return of the disease. In debilitated habits where the whole extent of the surface of the bowels are affected, we may con sider it as a hopeless case.

Enteritis some times terminates in gangrene in a few hours. This Condition is known by a weak fluttering pulse, a Cadaverous look, Cold sweats

absence of all pain, hiccup and a swelling of the abdomen. The case under these circumstances must be considered irrecoverable. But on the contrary if we have an open free pulse, the skin and Countenance natural. The urine deposits a copious sediment, the pain abates and the patient has in a great degree his natural feelings we may prognosticate a favorable issue.

When Enteritis has been ascertained to exist our treatment is very simple. Our first step should be to try and open inflammation by blood letting to the amount of the quantity of action. Should we not prove successful in subduing inflammation by the first bleeding, we should repeat it again and again, and not let the bug-bear debility deter us

from debilitating remedies. Though we should have a sufficient command over ourselves always to be governed by the quantum of disease, and that is only to be gained by a strict attention to the different symtoms presenting themselves. The pulse generally rises by the abstraction of a small quantity of blood, as the system is freed from the oppression or apparent exhaustion which often occur in the outset of the disease. In very urgent cases it has been proposed to put the patient into a warm bath and open a vein. The abstraction of a quantity of blood, is thus rendered not only more effectual but more certain. In addition to bleeding generally, it has been advised to bleed locally by applying a dozen or two leeches to the

Abdomen, or by Cupping. In the mean time we are to give mild Cathartics such as Oleum Ricini and Sulphas Magnesia in small doses repeated frequently, untill a free evacuation from the bowels is obtained. If after we have subdued the general Symtoms of inflammation the pain in the abdomen still Continue we should apply a blister over the whole abdomen. Fomentations are much more preferable in the early stages of the disease. Cloths rung out of hot water and applied to the abdomen have been of essential service. Injections of warm water have been used with decided beneficial effects. If the stomach be very irritable, and rejects medicine in the fluid form small doses of Calomel in Combination with

opium has had a tendency to quet the distreping
nausea and vomiting attending Enteritis.

"The use of opium in large doses after free
and copious venesection in Enteritis has succeeded
in this Country as well as in Europe." Dr. Armstrong
recommends it as of the utmost value. But our
reliance is upon the lancet. The patient should
be bled untill he is free from pain. Should the
pain return we must have recourse to the lancet
again. paticular attention should be paid to the
evacuation of the bowels, they should be opened
by some Cathartics. as Calomel. Castor oil or Epsom
salts. We should strictly enjoin the anti phlogistic
regimen upon our patient. His food should Consist of
mild diluent farinaceous drinks. as barley water.
Sago. arrow root et cetera.

An

Inaugural Dissertation

on

Enteritis

Submitted to the Examination of

The Right Reverend James Kemp. D.D. Provost,

The Trustees and Faculty of Physic of

The University of Maryland

for

The Degree of Doctor of Medicine

by

Benjamin Watkins

Maryland

April 2nd 1827

The Subject which I have chosen for my inaugural dissertation, is one which has met the eye of every Practioner, and which leaves me only to recapitulate those doctrines, which have been taught antecedently. My experience in Medicine has been of such a limited nature that to attempt any thing original would be the height of presumption. Knowing my inability to perform the task incumbent upon me without authority and its aid. To it I must ~~trust~~ and ask your attention for a short time while I in as breif a manner as possible describe to you first the Causes of Enteritis secondly the Symtoms attendant on this disease, and thirdly after the disease is fully established to point the Mode of treating it. All of which I deem necessary to Constitute a Complete paper.

An

Inaugural dissertation on Enteritis.

This formidable disease is met with in all season and in all ages. It is an inflammation of the Coats of the Intestinal tube. It is Considered by some to be the most frequent, and it is also the most dreaded as it runs its Course the soonest. Enteritis has been known to end fatal in four days.

The Causes of Enteritis are very numerous and various. Cold and moisture are Considered the most frequent Causes of Enteritis. But it may be excited by some irritating substances applied immediately to the part such as an over distention of the alimentary Canal with highly seasoned food, intemperance, and accumulation of harden faces. It has been no doubt brought into action by highly stimulating Cathartics when the parts have been in an irrita

ble state. Dr Potter says any hot acrid material will excite this disease into action in some persons.

The morbid appetite of a pregnant woman desiring substances, which been gratified, has been the Cause of Enteritis. Such as large portions of nutmeg and orange peel, cold water drank while the system is much heated has very frequently given rise to this disease. There may be added some natural or accidental organic mischief in some part or other of the Intestinal tube as being the Cause of Enteritis. Such as Ventral, inguinal or other hernias or intro susceptions of various Kinds, or infarctions from a retention of the faces in the bowels. also it may be occassioned by Stony Concretions in the Intestinal Canal.

The symptoms of Enteritis usually begin with a sense of Coldness and shivering and an uneasy sensation in some part of the abdomen, at first remitting or intermitting and by degrees arising to an acute pain. This sensation soon spreads over the whole abdomen. There is a great tension of the abdomen and very sensible to the touch The pain is very acute when the parietes of the abdomen are prefsed on. There is great flatulency accompanied with spasm shooting backwards towards the Spine. Obstinate Costiveness and inclination vomiting. The pulse in Enteritis is hard small and frequent. it is sometimes soft. The tongue dry. the thirst great. The Urine very high Coloured and discharged with difficulty, and from the contracted state of the abdominal Muscles the

patient is perpetually inclining forwards.

Enteritis is generally distinguished by great prostration of strenght restlessness. a continual tossing of the arms. great anxiety of the Countenance and Costive ness. This last symtom though not constantly. is yet so generally met with in Enteritis. where the peritoneal surface of the intestine is primarily affected. that it may be looked on as one of the diagnostic marks of this disease.

But if peritoneal inflammation occurs in the Course of Typhoid or other fevers. Diarrhoea is generally observed to prevail. The pain which is referable to the navel is increased occassionally in a paroxysm probably from a Spasmodic Contraction of the Muscular Coat of the Intestines.

If these be not relieved immediately all these symtoms become aggrevated, instead of feculent st-ools there is an ineffectual straining with a small mucous discharge. The vomiting still Continuing and retching increasing faces burst through the valve of the Colon and the stercoraceous matter is discharged per orem, much to the annoyance of the patient and attendants, at lenght the tortue ases, and the patient appearantly seems to have obt ained relief. But his pulse intermits, his face grows pale his extremities colds. Convulsion succeeds to Convulsion and death closes the scene of the unhap py sufferer.

The most usual termination when fatal is that of gangrene for it is rarely that it runs into a Suppur

An

Inaugural Dissertation

on

Dysentery

Submitted

To the Examination

of

The Reverend Jas. Kemp D.D.

Provost

the

Trustees and Medical Professors

of the

University of Maryland,

for the

Degree of

Doctor of Medicine.

by

Richard G. Ridgely

of

Baltimore.

on the

Second day of April

1827.

Dysentery may be defined a disease in which there are frequent stools, accompanied with tormina and tenesmus, and generally attended with pyrexia. Though discharges frequently take place from the bowels, yet they seldom contain any feces but consist principally of inspissated mucus, more or less streaked or mixed with blood; and when feculent matter does appear it is usually in small hardened balls denominated scybala. A discharge of these scybalæ, whether it be accomplished by the efforts of nature or obtained by the action of medicine is always succeeded by a mitigation of the pain.

This disease is most prevalent in warm climates, and in temperate climates during the warm season of the year; and in countries & and situations and in particular seasons also, most favourable for the production and existence of intermittent, remittent and bilious fever; and indeed it is frequently combined with these diseases.

The remote causes of dysentery are various; the following may however be deemed most frequent:— Sudden and great vicissitudes of the atmosphere from heat to cold; the exposure of the body when preternaturally warm or deprived of its accustomed covering, to cold or humid air; sleeping upon damp or wet ground and long application of moisture to the surface of the body by wearing damp clothes; all of which act by checking perspiration & determining an unusual quantity of blood to the abdominal viscera. Among the remote causes we usually find enumerated certain ingesta taken into the stomach as animal food verging to a state of putrefaction; acid and unripe fruits, and even ripe fruits when taken in immoderate quantity; but the action of the latter set of causes is not quite so intelligible,

because as they are applied immediately to the surface of the stomach and intestines a priori we should be induced to expect diarrhœa & not dysentery; nevertheless we must admit that dysentery is frequently produced by unripe fruits taken immoderately; but we apprehend that ripe fruits seldom if ever produce this disease, and on the contrary if judiciously employed will act as a preventative by keeping up the peristaltic motion of the alimentary canal.

It is maintained by Cullen and many other writers that dysentery, after it has once taken place, may be kept up by contagion or in other words may be communicated from persons labouring under the disease to the healthy. To this doctrine I cannot subscribe, because we can generally trace the disease to its correct source by referring it to some peculiar circumstances of the season, atmospherical vicissitudes, improper exposure to damp air, or injudicious articles of diet, and, when it prevails as an epidemic, to some unknown but peculiar property of the atmosphere. If it were contagious, why does it appear only at certain seasons of the year, and only under certain circumstances? A disease strictly contagious must be so under all circumstances and at all seasons; and the peculiar virus, or principle on which its contagion depends must be capable of acting whenever it comes into contact with a subject liable to its influence, independently of all external circumstances.

Dysentery usually comes on with a loss of appetite, sickness of the stomach, nausea and sometimes a slight vomiting: it is usually preceded by constipation of the intestines, and a painful distension of the abdomen; but in some cases it is preceded by a looseness of the bowels and some degree of diarrhœa, though the stools are seldom free and natural. The desire to go to stool, from the very com-

mencement of the disease is frequent, and in indulging it very little is voided; but the discharge is generally preceded by severe griping pain and attended with tormina; a rumbling noise usually attends, and there is a discharge of much flatus. The stools put on various appearances; commonly, at first they consist of frothy mucus alone, at other times a mixture of frothy mucus & slime; with a small quantity of feculent matter. In the first the constitute the disease called morbus mucosus or dysenteria alba: generally however, and particularly when the attack is violent the stools are in the commencement discoloured by blood and inspissated mucus, putting on the appearance of lumps of cheese at other times a liquid matter is voided resembling the washings of putrid meat; and, when the disease is extremely violent there is a discharge of nearly pure blood. In the stools we seldom find any portion of feculent matter, or the natural contents of the intestines; when it does appear it is in small quantities & in hardened balls, moulded to correspond with the cells of the colon; and the discharge is preceded by severe griping pain, & attended by tormina; there is always attending the discharge a peculiar & highly offensive odour, so that a person but slightly acquainted with the disease, is able to recognise it the moment he enters the apartments of patients labouring under it.

When these symptoms have continued some time & in some cases at the very commencement they repeat ensues, and is generally preceded by a chill and always a sensation of cold to a greater or less degree in different cases & is succeeded by increased heat, a full, quick and tense pulse though seldom hard; a dry and hot skin with more or less thirst; a furred and white tongue

becomes dark as the disease advances; a languid eye and a face somewhat flushed, with a quick & sometimes difficult respiration. The pyrexia however is very apparent in different cases. In some it is the most alarming feature of the disease in others it is slight and after continuing a few days entirely ceases, leaving behind the local symptoms of the disease.

The duration of the dysentery is very much influenced by the violence of cause exciting it, the degree of pyrexia present, and the state of the local symptoms. —— When produced by no violent cause, attended with little pyrexia, and the local symptoms are moderate it may entirely subside in a few days; on the contrary when a violent disease is induced, attended with much pyrexia and severe local symptoms, death may take place as early as the third or fifth day, about the eleventh is the most usual time or the febrile symptoms may abate & the discharge continue some weeks.

On post-mortem examination nearly the whole of the abdominal viscera are found diseased more or less, but in the large intestines and particularly in the colon the greatest ravages appear, that intestine in some parts of its length being contracted to half its usual size, its coats highly inflamed, its vessels engorged with blood and the internal coat eroded & ulcerated; the ulcers putting on the appearance of chancre, and in many cases during its whole length it is found gangrenous and its structure entirely destroyed. The other intestines in many cases exhibit similar appearances, but not to the same extent; nor is the stomach as much involved in disease, but the liver is generally materially affected, its substance enlarged & its vessels highly distended

The peritoneum also is more or less diseased during its whole extent. Frequently thickened in structure & the vessels injected with blood.

With respect to the proximate cause of dysentery a great variety of opinions have been entertained. The doctrine held before the time of Cullen was that the disease depended on acrid matter received into or generated in the intestines, which, by eroding them and increasing their peristaltic motion, produced the phenomena observable in the disease. Cullen has very satisfactorily confuted this doctrine, but in laying down his own opinions he has not been quite so fortunate, because in giving us the constriction of the Colon as the proximate cause, he mistakes one of the most striking effects of that cause for the cause itself. Constriction of the large intestines undoubtedly exists in this disease, and is fully proved by the retention of the feces and their peculiar appearance when voided, being moulded to correspond with the contracted cells of the colon; but constriction alone is not sufficient to explain the phenomena of the disease. The doctrine at present entertained by the most enlightened pathologists is, that it is a disease of a highly inflamatory nature, consisting in inflammation of the intestines and most of the other viscera of the abdomen, preceded by congestion from suppressed perspiration and attended by a constriction of the large intestines: to which may be perhaps added that the liver is not only highly diseased itself, but, by the peculiar relation which it holds with respect to nearly all the other viscera of the abdomen, the disease is greatly aggravated in contiguous parts. The

liver, in common with the other organs, is inflamed & in a state of congestion; this circumstance, its secretory function is for the time suspended, and hence we have no bile in the evacuations from the intestines. We shall immediately conceive how the diminished action of the liver may increase the inflammation and congestion of the other abdominal viscera, when we reflect that the blood in passing from these viscera to the right side of the heart, must pass through this viscus and that too through the most minute ramifications of the vena portarum to the ascending cava. In this condition the liver is unable to perform its ordinary function and consequently the circulation of the abdominal viscera is nearly intercepted; and hence it is a most important indication in the treatment of this disease to restore the healthy action of this viscus.

From the views above given of the causes of this disease and the phenomena which attend its course, the mode of treatment is plainly indicated; and it gives me pleasure to say that the present enlightened plan of treatment, when early adopted and carried to the requisite extent, in the usual appearances of the disease seldom fails of effecting a cure. When a failure does take place it may in general be attributed to neglect of applying for medical aid until the disease has completely taken hold of the system, and produced so great a prostration of strength, that our energetic treatment is inadmissible, or the violence of the exciting causes may be so great as to induce a disease of so virulent a nature as to baffle the skill of the ablest physicians.

The latter cause of our failure in the cure of this disease is however much more rare than the former.

The indications of the treatment of dysentery may be arranged under the following heads.

First. To remove the inflammatory condition of the intestinal canal

Second To restore the secretory action of the Liver.

Third. To restore the healthy action of the Skin. and lastly to invigorate the system & restore its healthy functions

The first indication may be answered by all those remedies that are usually employed for the reduction of inflammation. When there is considerable vascular excitement, attended with a pulse increased in frequency and somewhat tense and full, bloodletting must be employed. I would here remark that in dysentery the pulse is seldom hard, so that if we were to take the pulse as it appears in pleurisy for our guide in dysentery, we should seldom have recourse to venesection in the latter disease Bloodletting should be carried to a sufficient extent to make a decided impression on the disease, and to do this a large bleeding sometimes amounting to 30 ounces is necessary; in general however from 16 to 20 ounces will be sufficient.

In having recourse to venesection we must recollect that in all diseases of a highly inflammatory action it is better to draw blood in large quantity at once and by a large and full stream, than by drawing it off frequently and in small quantities. Should the first bleeding not be succeeded by considerable mitigation of the symptoms, as demonstrated frequency of the pulse some relief of the pain and other favourable symptoms, it may be repeated from time to

time as often as may be necessary. after venesection has been carried as far as the state of the pulse and other circumstances will permit, should there be pain and tension of the abdomen we may have recourse to topical abstraction of blood by the application of cups or leeches; these are found most excellent remedies after the lancet has been carried to the necessary extent. Among our remedies for fulfilling this indication, blisters hold a most important rank; the most decided and unequivocal benefit arises from their application some discretion however is necessary in their use; bloodletting should be carried to the necessary extent to reduce arterial action, before they are applied; they should be large and placed over the most painful part of the abdomen. In consequence of the continued motion of the abdominal muscles in respiration blisters on the abdomen give considerable pain; in some degree to obviate this I have known them placed over the lumbar regions; in these situations however they do not act with the same effect as on the former part.

Purging is a very important mean of moderating inflammatory action, but as it is the principal operation to be relied on in fulfilling the second indication I will treat of it under that head.

The second indication in the treatment of dysentery viz the restoration of the secretory action of the liver, may be answered by those remedies which are considered to excite a specific action on that organ as well as those which make a general impression on the system. In pursuance of this plan, as soon as the disease has manifested itself decidedly, we

should administer an emetic of Ipecacuanha, with a small portion of emetic Tartar to quicken its action, or if preferred the emetic Tartar, may be substituted for the Ipecac. Vomiting, as it agitates the whole body, mechanically compresses the liver and emulges the biliary ducts, must have a considerable influence on this organ and accordingly we find much advantage from the early administration of an emetic.

Our chief reliance however attendant to this indication, should be placed upon active purging with calomel, which not only evacuates the intestinal canal, and thus removes a mass of highly irritating matter, but exercises a specific action on the Hepatic System, overcomes its diseased action and restores its healthy function. After the operation of the emetic we should administer 12 or 15 grains of Calomel combined with 20 or 25 of Jalap, accommodating the dose to the age & circumstances of the patient. If the dose should not operate in due time we should order an enema, or advise Castor oil or Epsom salts. I am fully aware that oil has long had a high reputation in this disease and still maintains much credit with some practitioners, but I am inclined to consider it inferior to many other articles in this disease. When our object is merely to evacuate the intestines, Castor oil will answer our purpose, but in dysentery we have something more in view. The intestines are in a state high inflammation and any remedy that will produce an increased discharge from their distended vessels must have a salutary effect; because it acts on the same principle as the topical abstraction of blood from an external part in a state of inflammation

Sulph. of Magnesia, in common with other neutral salts, is well calculated to produce this effect. When by the above means we shall have succeded in opening the bowels freely, we may administer 6 or 8 grains of Calomel every 6th or 8th hour until we have a free discharge of bile with the above discharges; the doses & intervals after which they are to be given, must however be regulated by the circumstances of the case.

To quicken the Calomel and prevent its specific effect we should occasionally interpose a dose of some more active medicine. This circumstance requires attention, because Calomel given in repeated doses without this precaution, very soon affects the mouth, which in many cases of dysentery is unnecessary, and subjects the patient to considerable additional suffering.

It may in some degree be considered as an established rule to keep up the purging until the discharges appear natural and the bile is restored to its ordinary healthy state; this will in many cases require serious consideration, as symptoms of debility may arise and a change of treatment become necessary.

The third indication in the treatment of this disease is to restore the healthy action of the skin. As a very large proportion of the excrementitious matter, no longer fit for the purposes of the animal economy, is carried off by insensible perspiration it is evident that an obstruction of this perspiration must result in disease & to the removal of this disease it is of the highest importance to restore that action. With this view, as also to assist in the reduction of arterial action, after blood letting we should administer small doses of nitre, with from the

sixteenth to the fourth of a grain of emetic Tartar added to each at intervals of about two hours or oftener if thought necessary. When the inflammatory stage of the disease has somewhat subsided we shall derive great advantage from ~~small doses~~ a combination of Opium & Specac. in the proportion of from a fourth to half a grain of the former, to from one to three of the latter & in obstinate cases a small quantity of calomel may be added with much advantage.

Deafness is a most important part in the cure of dysentery & should never be lost sight of; in inducing it we are to be governed as in other febrile diseases We must however confess that we think Dr. Mosely & some other writers have carried their theoretical speculations too far in placing this remedy above the more active ones in the reduction of inflammation

In the progress of the disease circumstances arise which require attention. When the straining at stool is very severe it often happens that a portion of the internal coat of the rectum is protruded without the anus: this is always troublesome & requires particular attention. It should be replaced immediately & if inflamed, some cooling lotion should be applied to it & kept in its proper situation by a compress & T bandage. When the tormina & tenesmus are very severe I have found much advantage from an anodyne injection of from 60 to 90 drops of Laudanum in half a pint of Flax seed tea. Injection of the mucilage of gum Arabic & of a decoction of starch & particularly of fresh churned butter without salt, are highly grateful to the inflamed and irritable intestines. During the inflammatory stage of the

disease the patient should abstain from all solid food. his strength should be supported by gruel, barley water, rice water &c. which may be given freely as they assist in determining to the skin.

As it was my intention merely to treat of the disease as it usually appears in the middle section of the country, and in its inflammatory state, it does not fall within my limits to notice the various forms it assumes. I shall only remark that when it is combined with intermittent fever, the most judicious practice is to cure the dysentery first & then attack the fever.

In the fulfilment of the last indication, viz to invigorate the system & restore its healthy functions the physician has little else to do than to give his patient general directions for the regulation of his conduct. When the fever & other urgent symptoms of the disease have disappeared, but the patient is left in a state of great debility, with a weakened & relaxed state of the bowels, it is proper to administer tonics & bitters. Among these a decoction of bark, with an infusion of Virginia Snake root, has been highly recommended. Infusions of Quassia and Columbo & decoction of black berry & dewberry root, besides a great number of other articles from both the vegetable & mineral kingdoms, are used. The propriety of giving astringents in any stage of this disease is questioned by some practitioners: for it may be presumed that when the disease is attacked with vigour in the onset, & the treatment carried to the point necessary, astringents will seldom be necessary. The disease however sometimes assumes the chronic form & the discharge

assume the state of those in diarrhœa. In that case they become necessary; and the remedies generally appropriated to that disease should be applied to them. The diet of convalescents of this disease requires the closest attention: it should be light & moderately nourishing; any thing that would irritate the intestines must be avoided. The lighter kinds of animal food & vegetables possessing the least acidity are perhaps best. Spirituous liquors are generally inadmissible.

I cannot close these remarks on this disease without alluding to the practice, which has lately been introduced or revived, of applying a compress & roller of flannel around the abdomen in the latter stage of the disease. This answers the double purpose of supporting the relaxed intestines & of affording them the proper degree of warmth; and may be considered a useful auxiliary in the treatment of this disease.

Observations

on Chorea St Vita -

By. James McConnell

of Penn.

An Inaugural Dissertation

on Chorea St Viti

Submitted to the examination of the

Right Rev.d James Kemp D. D. Provost

to the Trustees & Faculty of Physic

of the University of Maryland,

for the Degree of Doctor in Medicine,

on the 2.d of April 1827

By James McConnell

of Pennsylvania

Observations On Chorea Sancti Viti
Or Saint Vitus's Dance —

tho. the disease of Chorea would from its nature appear to be
f those that would be found in every period of the history of the
an race (except perhaps in the merely savage state when diseases
ct the arterial system so much and the nervous so little, Yet it
not been mentioned by ancient physicians either by those who
te when the ancient world was more corrupt or by those who lived
rlier and more happy times. reasoning a priori we might have ex=
ted to have received some account of the nervous affection from
(Greek) physicians who lived during the decline of imperial
e however they have not mentioned it a disease, it has been dis=
ed by Galen under the name of Scelotyrbe. and this was forme=
supposed by some physicians to have been the one in question but
ill not be necessary for me to go into discussion on this subject as the
sicians of the present day do not I believe consider the disease described
Galen as Chorea (I may however remark that it was probaly paraly=
of the lower extremities. the Scelotyrbe has also been supposed to have
scurvy) an investigation with respect to the first appearance of
rea would be curious and perhaps more curious than usefull the
ase existed before the time of Sydenham however since he speaks
as known by the name of St Vit. Dance — — — — — —

The origin of the name is somewhat
re it is said that some german fanatics were in the Yearly habit of
ing a pilgrimage to and worshiping at the Shrines of St. Vetus in their
try (this worthy personage had two Shrines the one at Ulm the other at
sburg) their worship consisted in dancing and gesticulating probaly

itation of David dancing before the ark his votaries expected from
a renovation of health and vigour during the ensuing Year they felt
is duty however to appear every year before the Shrine of their Saint in
onth of May and their non performance of this duty was punished
angee jirkings in their muscles. this jirking a continental writer
idered as the effect of imagination and fear it is said that from these
ing fanatics the disease under consideration got the name of Chorea
Dance of St. Vitus. - the disease now known by the name of Chorea
ti Viti is preceeded by the loss of the usual vivacity and playfullness
youthfull victim on the contrary in his motions and depressed
spirits at the same time his appetite usually becomes ravenous and
owels costive his abdomen also commonly becomes tumid the disease
erally commences by a lameness or instability of the legs which the
nts draws after them in a rediculous manner. slight irregular motions
muscles of the face are soon observed and are the harbingers of the
violent Convulsive motions that now attract the attention of the friends
patient, the Convulsions at the commencement of the disease affect one side
body more than the other and cease during sleep, at this stage of the
se the situation may be thus discribed he does not walk steady his gait resembles
uping or starting he sometimes cannot walk seems fatisid or can they
m the common and necessary motions, with the affected limb or limbs
word when the patient wishes to be at rest the muscles are perpetually
cing and distorting the limbs face and trunk and when any motion
ttempted by the will it is performed irregularly and with difficulty
several useless efforts - thus if the patient takes a cup of drink he per-
ns as Sydenham has remarked, a thousand rediculas gesticulations
he is able to bring it to his mouth for he cannot direct it in a straight
his hand being drawn hither & thither by the Convulsions, but is compelled to

e it about for some time, till at length reaching his or their lips they flings the
or suddenly into their mouths and drinks it greedily as if the poor creature
ined only to excite the laughter of the spectator as the disease advances
involuntary motions affect both sides of the body and even during sleep
ther the patient has very little sleep and that little unsound and
rbed on account of these motions . . . . . .

I believe however that even in the most
the convulsions are not as great during the little sleep the unfortunate
ent has as during the waking state from this very disagreeable state
e generally (at least in the milder forms of disease) recovers the patient without
ssistance of art. Medical asistance it is however our duty to give in
s place, perhaps this disease does in some instance produce death,
reading and information of the writer of this slight essay is not suffi-
t to satisfy himself on this point but he confesses that it does appear
able that a disease which reduces the patient so low should some-
es destroy them. (Prof.ssor Potter states very truly in his valuable
ure on this disease, that it may be succeeded by Epilepsy) in the
ond place, is it not extremely probable that a disease, that so
ently convulsis the nervous system must leave behind it a debilitated
shatter constitution - in the third place it often continues for a long
e towards puberty (when most commonly the disease ceases of itself)
it frequently begins long before that period and should not be permitted during
dious interval to afflict and torment the unfortunate patient
Finally it often leaves disgusting marks of its ravages in involuntary
ions of some muscles and in distortion of features even after it appears
ave left the General System - - What then is the best method of treating
ea Sydenham bled in this disease and during the intervals of bleeding
ging And gave tonics he did this from his theoretical views of the

ease what these veiws were we shall afterwards see. the next and
general manner of treating the disease & at present is by Tonics=
former days it was (the Cure) attributed to Antispasmodic - of various
ities - the variety of tonics of the vegatable and mineral Ringdoms
been used for this purpose. and it is impossible to deny that they have
frequently been used with success - bark & other vegitable bitters
erian and Camphor among the more stimulating articles of the Mete=
medica - Musk from the animal Ringdom - more especially of
years, the Sulphate of Zinc the nitrate of silver - and amoniated
from the mineral Ringdom has been prescribed and during their
bition the disease has unquestionably disappeared - sometimes in Consequence
Casual cessation, or removal of the irritation which excited it
sometimes no doubt from the direct effect of the Medicines in rendering
ody less susceptable of the ill effects of the existing irratation it is
in however that the symptoms of Chorea have continued with unrem=
g severety during the Employment of stimulant tonics and Antispas=
dic remedies during many months (Prof.s Potter remark: that we
use the cold bath in all seasons of the year. with the greatest advantage
d also. prefers the arsinate of potass. as a Tonic - says (Professor P.)
are of mercury unless you give it in combination with other Medicine
purgatives) Nay even for years on some occasions only terminating about
age of puberty - Blisters have been used and an instance of thier success
lated in the Philadelphia Medical museaum in a letter from
Peachy Harrison of virginia to the editor. .. — ...
a method of cure as some suppose more certain than any of the others
re indebted to Dr. Hamilton of Edinbg. that Gentleman relies intirely on
hibition of purgatives (Sometimes say Prof. Potter. their is a decrease of bile
eakness of the portal system then we can give purgatives with advantage
we must use tonics afterwards) we have alrea[illegible] seen that Sydenham

ve purges but he seems to have relied principally on the bleeding
of his remedy or Methods of cure a part which is now entirely ex=
led from the treatment of Chorea (and the inutility of which has
inferred from theory) under an Idea of evacuating by that means, from
irculating fluids an acrimonious matter that falling on the nerves did
in his opinion produce the Convulsive motions that constitute the
ase, Dr. Hamiltons idea appears to be that Chorea consists in a slug=
ness and irratability of the alimentary Canal and a consquence ac=
mulation of facal matter - The Cause of chorea is of much less con=
ence than its cure and we are more interested in examining wether the
of treatment recommen by Dr. Hamilton be such as we can entirely
on - For our satisfaction in this respect it is only necessary to observe
Dr Hamilton has long enjoyed the highest celebrity as a clinical
ctioner in the metropoles of Medical Science that these cases of chorea
Twenty in number) occurred Chiefly in hospital practice (thus open
view to the inquisitive Student) And finally this pratic if my informa
be not very incorrect has been adopted by very enlightened praction
Athº See (Profes: Potter) page 4.th) we will now attempt to give an
ount of the pratic recommended in Chorea by this very respectable
thman, three or four grs. of calomel and five or six of Jalap should be
n in Combination daily and the faces should ea day be examined,
their Changed and more healthy appearance gives a very favourable inde=
tion of cure - If the medecines operate favourably and we find the
ces instead of being small in quantity and of an Olive colour very
siderable in their quantity and of Yellow (ie bilious) colour we may conclude
t the convulsive motions will cease in fifteen or Twenty days or in a
rter time often indeed a very few days will suffice for the distruction if
wever either from the long continuance of the disease or from other causes
oducing a very great sluggishness of the bowles the medicine will not

ate we must have recourse to the more drastic Cathartic (
mmony - Gamboge) or to increased doses of Calomel & Jalap and
of especial consequence that in this State the doses of purgative medi-
s. should be given so as to support each other, It perhaps may be
icted by some that in a disease perhaps arising from debility and
tainly accompanied by it means so debilitating ought not to be
d, These are not however in fact debilitating measures ——
Hamilton found his young patients to increase in strength under
use of purgative Medicines Nor is this altogether without analogy the
e increase of strength is observed to take place in children labouring
s mesenterics atrophy, whilst their bowels are fully opened by purges —
whatever way these circumstances may be accounted for I have no
t but they are true hear what Dr. Hamilton says on this subject he
e patient) was excessively puny and emaciated and his abdomen
lank Yet from the 13th day of December when the commencement of his
edy was observable to the 25th December of the same Month the quantity
aces discharged was most wonderfull Such as I had never seen
re it appeared to me to have nearly equalled in weight that of the
e body of the extenuated patient Vide Ob. on purgative Medicines
ge 98. Now during this time the general health of the patient was
roved, his strength was increased and the disease was finally
ueed — but there is one precaution necessary to be taken and that
be firm and decided it is necessary in Order that the friends of the
ent may be convinced of Physicians Confidence in his own plan
Cure and not be allarmed by those fears of debility above alluded
nd it is moreover necessary because in this disease half Measures
e not do. were it not. Says Dr Hamilton for perseverance in un-
ding the alimentary canal the disease would be prolonged and
curring would place the patient in danger and thus bring into
credit a practice that promises Certain Safety ——

ter the convulsive motions have been subdued and the disease
apparently been cured tonics may be given for I cannot
llect from Dr Hamiltons work that he considers their exhibition
necessary he says I have not felt the necessity of having recourse
medicines of this class and again but many practioners set a
ue on them and the routine of pratice demands them, this manner
expression sufficiently shews the Dr. Opinion - I might remark
in this country we are not so much obliged to follow such a routine
however tonics can do no harm - It is of more importance to ob-
e that an occasional purge should be given after the apparent cure
e patient to stimulate the intestines and support their action - of
cure of Chorea I have nothing further to observe except that the
oval of an existing irritation or the restoration of one that had
viously existed may prove a cure of the disease - - - -

Profes. Monroe the Second said that he had frequently observed
ea comes on at the period of the second dentition and go off upon
lancing the gums and Dr. Darwin says in his Zeonomia that
had cured Epilepsy by reproducing the Itch in a patient who
previously that affection - I have read of more than one
similar case but do not at present recollect my authorities -
removeal of worms from the alimentary canal has been followed by the
sation of Chorea this perhaps may be considered by those who
que that the nevous affection is Symptomatic of the state of the
ac as a circumstance very much in favour of their position
if the irritation of worms may produce Chorea why not that
cried

Inaugural Dissertation

on

Dysentery

Submitted to the consideration

of the Professors

of the University of

Maryland

for the Degree of M. D.

April 2nd anno Domini

1827

By Adolphus Dunan

of

Baltimore

Nihil scriptum miraculi causa

Dysentery.

The part of medical science which I have chosen, as the object of this dissertation is far advanced. there is very little to be added to the justly esteemed Writings of those Celebrated men, who have occupied themselves in illustrating this point of Medicine. the powerful interest of suffering Humanity, should have, roused their genius of observation, and imposed on them, a task, not less honourable, than important, to find out and indicate the proper curative measures, which might oppose with success so terrible a Solague.

They have not deceived the expectations of their cotemporaries, and they have handed down to posterity useful materials, and precious works where by the Side of judicious reflections are found well established practical views.

It is to Sir John Pringle, Munroe, Stoke, Sydenham, and Zimmermann, from whom we are principally indebted for this rapid progress. The work of the latter in which is found, the descriptions of the divers Epidemical Dysenteries is rendered more useful, from the scientific manner by which their complications are distinguish, and, that, a relative treatment is the result of so useful a division.

My object in making choice of this subject, was not, to Collect all which those authors have written, so as to compare, and establish, to a certain point, the conformity of their opinions for such a work requires much time: an experienced pen, talent, and patience.

I shall therefore confine myself to the most essential points of this distressing malady.

Dysentery is classed by Dr. Cullen in the number of the Profluvia, it forms the seventeenth genus of his Nosology: it is the 9th and 10th of Sauvage and ranked by Professor Fin[illegible] in the class of the phlegmasiæ of the mucu[illegible]

membranes, and forms the Seventeenth genus of his nosology. it is characterised, primitively, by acute pain; vain and repeated efforts to evacuate the faeces; followed by mucus dejections, sometimes bloody, and tenesmus. the seat of this disease is in the intestinal Canal, and especially in the Colon and Rectum; affecting the mucus membrane of those parts, and producing phlegmasia; this disease, confines itself rarely to one or several individuals, it prevails most generally, in Camps; in prisons; in hospitals; and it finds productive causes of all Kinds on Ship Board; it has reduced the victorious army, more than once, and paralysed its energies. it does not spare the soldier in his quarters, and commits the most direful ravages, amongst certain nations. in the last instance, men: women: and children, where the lymphatic System predominates, are more liable to be attacked, and the indigent are the first attained by the disease, as they generally reside in unhealthy situations, in narrow streets, and lanes, filthy, and badly ventilated; and,

moreover they are deprived of most of the necessaries of life.

Dysentery is frequently remarked in low and marshy countries; during the warm and rainy seasons; particularly when very cool nights succeed warm days; very seldom a year passes but it makes its appearance in Holland; it prevails often in some of the cantons of Switzerland; it is very common in Batavia in the island of Java which is interspersed with canals and ditches, of which the stagnant waters render the air very noxious to health. it is common in the low lands of the island of St. Domingo; in Egypt; and on the coast of Guinea; which is a flat country; rather low; deprived of rain sometimes for seven or eight months. the powerful action of the sun, which is vertical twice a year, hardens the earth to such a degree, that the vapours are retained and they are not given out, until the rainy season, which is that of exhalations &c.

predis-
posing
causes.

Heat and humidity are considered as the principal predisposing causes of this disease; it is the opinion of Sir John Pringle. he says: that it manifests itself generally about the end of the summer months, or in autmn; the generality of the epidemical dysenteries enumerated by Zimmermann were produced by similar temperatures. the atmosphere, was very often and almost continually humid, and when the sun appeared the heat was intense. he does not attribute them directly to the cold which succeeded the heat, but rather to the alternative from cold to heat.

Sailors, that useful class of men: which forms a part of our national force; and who, trust themselves, with intrepidity to an inconstant and dangerous element, in going from pole to pole, extending our commercial relations, are exposed to all known diseases. if we consider the effects of sudden change of temperature, from cold to heat: often damp: and the sudden transition from one climate to another: the more or less altered air which they respire,

between decks. the bad quality of their food and the insalubrity of places which they visit, we will find contained in a small compass the causes of the diseases which attack them generally; such as: Gastric: Typhoid and Sinocus fevers: Scurvy: Rheumatic affections, and diseases of the intestinal Canal.

Exciting causes.

The degenerescence, and the too great quantity of bile is considered as the exciting causes of dysentery: the immoderate use of fruit: drastic purgatives: poisonous substances: moral affections: worms: food of a bad quality: an exclusive animal regimen: corrupted and animalcula water: new cider: the metastasis of an arthritic humor: of variolic virus: of a ring-worm: and of the generality of cuticular diseases: crudities contained in the intestinal canal: an acid acrimony which may there exist: and finally, most particularly Marsh effluvia.

Degner believes that the bile stirred up anger: impurities of the atmosphere and all other exciting causes may take on

themselves a corrosive character, and act on the system as the most acute poison. according to this author, this bilious acrimony produces the most serious dysenteric accidents, and which have their origin in the prima viæ; is then carried to some other part; alters the humors, and produces; pustules. spots. and other exanthemæ which may be observed in certain dysenteric patients.

Zimmermann has also distinguished a putrid or bilious fever connected with dysentery, but he does not attribute it to the bile principally. Stoll considers this humor as possessed of extreme mobility, and believes it susceptible of complicating simple dysentery; in the same manner that it does ophthalmia and Rheumatism. &c.

The appearance of many dysenteric epidemics, have been very frequently, attributed to fruit; because the disease declared itself at the time of their maturity and abundance. Some physicians credited this popular

opinion which was so victoriously combatted by the able pen of Tissot. his writings, contain an affinity of case where fruit have been employed with success, both as a curative and preventive measure. he says. the only result which might take place, in the last case, would be by diluting the bile, of which they are the principal diluents, and produce salutary Diarrhœa. this probably the origin of the prevalent opinion, amongst certain people, who cannot conceive, how a discharge from the bowels can preserve health.

Fruit nevertheless should not be eaten inconsiderately, or in too large a quantity. choice should be made of them, and ripeness indispensable. all kinds are not suitable during convalescence from a complicated dysentery, and according to Zimmermann the free use of them is dangerous in damp and marshy countries for they debilitate the digestive organs, and cutaneous secretion.

Doctor Cullen, in refutation of the pretended dysenteric action of acrid matter introduced, or engendered in the intestins, believes, that, the principal or secondary cause, consists in an extraordinary constriction of the Colon: which gives origin, to those Spasmodic efforts which are perceivable during the pain; and which are propagated to the Rectum and creates tenesmus and mucous evacuations.

Persons who have laboured under dysentery are very subject to Rheumatism and Opthalmia: in these cases, the intestinal affection is immediately removed. Paralysis may be the result of this disease, when the disease becomes chronic, the inferior extremities are sometimes affected; the brain in those cases is but little diseased; for it is a paralysis of debility. dysentery may be connected with a bilious fever; this occurs very frequently in prisons, and on Ship-board; and the patient retains all his muscular strength until death.

Prognosis

Dysentery is more or less dangerous, according to its simplicity or complication; to the nature and permanence of its causes; the age and temperament of the person afflicted.

No disease is more susceptible of relapse, and none leaves after it more accidents, depending on its complication and continuance.

In general, the signs of a fortunate termination are, a sabaceous evacuation, and the disappearance of all the symptoms which existed in the two first periods; and all the other succeeding symptoms; but the issue is always uncertain, when the disease does not diminish, and progress resisting the treatment put into practice.

Simple dysentery generally terminates in a few days and with facility, provided there be no fault of regimen: nor contrary medicines employed, in which case, it may be converted to a Lienteria (Laxitas intestinorum). degenerate into a collaquative Diarrhœa; and take on itself a chronic character, followed by an obstruction of some of the abdominal viscera.

Treatment. Dysentery accompanied with inflammatory fever, left to nature, and a well conducted, antiphlogistic treatment soon terminates successfully. Gastric dysentery will soon yield to the same mode of treatment if properly managed.

Many respectable writers have said that the fever in this disease declared itself immediately, but several hours, and, days may elapse before febrile symptoms are manifested, the discharges may also differ, sometimes it is pure mucus — (Dysenteria alba.) at others pure blood, — (Dysenteria Sanguinolenta.). in Scrofulous habits afflicted with this disease, ulcerations are sometimes found, they may also arise from the intensity of the Case.

When the disease is of an inflammatory nature, the antiphlogistic plan of treatment should be adapted, venesection becomes necessary and moderate doses of the mild muriat of mercury increased, as the case may require, and purgation should be carried on until the pain ceases, and the inflammatory diathesis

Treatment.

is destroyed, and the evacuations become natural; the astringents are sometimes used, particularly the Simaruba: the combination of Ipecacuhan and Opium, to which may be added a sufficient quantity of the antimonium tartarisatum, may very frequently prove very beneficial &c.

The tonics may then be used with advantage, the Cinchona, taken in Wine; the aromatics: such as the Rad: Colomb: Canella alba: and Quassia excelsa. &c.

In this feeble dissertation, to which, I devote but a limited time, I have attempted, to shew that dysentery is a disease, to which all classes of Society are liable; that it is classed amongst the phlegmasiæ of the mucus membrane, and that it is seated in the large intestin, and particularly in the Colon and Rectum: of which the ulceration is but an accident, which may be Sporadic, but oftener Epidemic.

Contagion

Dysentery is not essentially contagious.

Finis

An

Inaugural Dissertation

On

Inflammation

Submitted to the Examination of the

Right Rev.d James Kemp. D. D. Provost.

&

Medical Faculty

of the

University of Maryland.

for the Degree of

Doctor of Medicine

By

Robert H.y Brodnax of

Virginia

1827.

feels, he will tell you much better, or perhaps very well; but the calm is a deceitful one, and if the gangrene be extensive, only the premonition that the unfortunate being is soon to be hurled from the stage of existence

As the gangrene advances, the part gradually assumes a livid and sometimes a black hue, the heat entirely ceases, all tumefaction disappears, the softness and flaccidity increase, the pulse becomes weak and irregular, the countenance changes from that of febrile anxiety to extreme exhaustion, the parts lose their consistence and exhale a cadaverous smell; a low muttering delirium succeeds and closes the scene.

I would not be understood to maintain that these violent symptoms attended all mortifications, but only such cases as involve important members or are connected with some vital part.

These are the three most usual terminations of inflammation. But many authors, however, describe other modes of terminations, the principal one of these is that of scirrhus. "But although that affection may, perhaps, in a few instances follow inflammation, says Mr. Bell, yet it is by no means a common consequence of it. Hence, although inflammatory affections may justly enough be mentioned as one of the many exciting causes of scirrhus, yet the consideration of this disorder can never with propriety, it is presumed, be introduced into an account of inflammation."

I shall now proceed to make a few observations on the principles of treatment in this affection. It must be very obvious from the description of inflammation that these are varied by

many circumstances; as the period or stage of the disease, the habit of the person affected, the exciting cause and the structure of the parts inflamed: but the general plan of treatment may, I think, be laid down with tolerable accuracy.

It is now almost universally admitted, that whatever contrariety of opinion may exist with regard to the true theory of inflammation; no matter how different the various speculations of those who have been engaged in the investigation of this subject may be, as respects the proximate cause, the first grand object in view of the surgeon is to lessen the vis a tergo; to diminish the immoderate action of the heart, for by restraining its force, less blood will be sent to the various parts of the system, and of course to the affected part: or perhaps, to speak more correctly the blood will not be sent in its successive rounds with so much rapidity as it had been, before the heart was tamed, the inevitable consequence of which will be, that the vessels will be enabled to throw off the accumulation, (for it is agreed on all sides that there is an accumulation in the part inflamed) with greater facility.

In order to accomplish this purpose, when resolution is attempted, which should always be the object of the surgeon when he is called upon in time, we must in the first place studiously endeavour to effect the removal of all those causes which are calculated to produce irritation and excite the disorder. If for instance a grain of sand by some accident should be lodged in the eye and occasion inflammation, no person would attempt to subdue this inflammation before he had first endeavoured to remove the offending

cause; or if the irritation of a splinter should excite phlegmonous inflammation, who would not of his own accord extract the extraneous body, for it is evident that so long as the cause continues to exist, it will be in vain to expect to remove the effect, but "sublata causa tollitur effectus." Foreign bodies in wounds often become the exciting cause of inflammation, and these should be taken away as soon as possible, provided we can come at them without increasing the irritation; splintered pieces of bone often produce this affection and require to be removed; in cases of gun-shot wounds we often have independently of the ball which has entered, various other extraneous bodies, such as bits of cloth which are carried before the ball. It is very evident that we should remove these bodies when practicable. An inflammation sometimes proceeds from the luxation of a bone, the head pressing on the surrounding parts occasioning pain and irritation, and who does not at once see the propriety of placing it in its proper situation. Such exciting causes may be often detected and removed, and this is advancing considerably towards the cure of inflammation. But in all these cases we should be particularly careful not to use any violence towards the parts, if the situation of the foreign body be such as to preclude the possibility of coming at it with ease, it is always better to suffer it to remain untill sloughing takes place, when it will generally be discharged along with the slough.

After having removed the remote cause, when practicable, our next object is to moderate by other means the violent action of

the heart and arteries, produced by the irritation of this cause. Among these means, bloodletting occupies the most conspicuous place. We may truely say the lancet is our sheet anchor in this disease, to use the words of an able and distinguished Professor in speaking of the use of bloodletting in yellow fever, it is our "Sine qua non", for without bloodletting all our efforts to subdue inflammatory affections, especially when in an aggravated form, would be precarious and uncertain.

If the doctrine we have advanced be correct, that inflammation depends upon a weakened state of the capillary vessels, and that consequently, there is a preternatural accumulation of blood in the inflamed part, it follows that the abstraction of blood is the principal means of removing this accumulation and restoring the healthy action of the part, because it diminishes the action of the whole arterial system, and of course, less blood is sent to the minute vessels generally, the consequence is, that the congestion of the inflamed vessels is lessened, for this evident reason, that the force of the heart is not so violent, the blood is not propelled with the same velocity, and the weakened vessels have time to free themselves of the inordinate quantity of blood and thus gradually acquire their former tone.

The indiscriminate use of the lancet in all cases of inflammation, is to be censured, more particularly when it is considered as the only remedy we can employ. This remedy, though the most valuable, with which we are acquainted when judiciously applied, may be, like all others, abused when in the hands of the ignorant and presumptuous. When there is a

poison of any kind existing in the system, and when inflammation is complicated with an unhealthy condition of the stomach and alimentary canal, bleeding should be resorted to with great circumspection, and not indiscriminately carried to that extent which some practitioners are in the habit of doing. When there is great induration attended with little pain or general febrile symptoms, or when there is a probability of a protracted suppuration the lancet should be employed with caution. Where the inflammation depends on a mere local weakness, or where there is considerable general debility accompanying it, general bloodletting should be used sparingly, if at all, but perhaps the best practice in these cases would be to avail ourselves of topical bloodletting, and the other means usually employed for subduing this disorder. It is very evident that bleeding would be entirely unnecessary when the local affection was trivial, when the symptomatic fever was inconsiderable and when the patient was old and consequently weak.

On the other hand when the patient is young, robust, and of full habit, when the inflammation is extensive, the constitutional affection considerable attended by a quick strong pulse, great heat and thirst, bleeding should be carried to the greatest extent. Bleeding is also indicated in those cases in which we wish to prevent the formation of matter. Inflammation of the is an instance illustrative of this, for if suppuration be permitted to take place, it will be attended with so serious a destruction of the internal structure and organization of this organ as to preclude the

possibility of the future restoration of vision; and the patient will be rendered miserable the remainder of his life. Under such circumstances it is necessary to carry bloodletting to a considerable extent, and to repeat it as often as the necessity of the case requires.

Bloodletting is most effectual when employed early, and when the blood is evacuated suddenly. It has been supposed that bleeding is more effectual when employed near the part affected than it is when employed in a more remote situation. But I think, (and I have good authority to support the opinion) that it matters very little, so we get the blood from the general system from what part it is taken. Topical bleeding may be useful, when the blood can be taken immediately from the inflamed vessels, but we are seldom able to do this by any of the ordinary means employed for extracting blood in this manner. It may also afford some advantage by the irritating effect which is occasioned by the application of the cupping glasses and leeches, (the means usually employed for this purpose) causing the vessels to contract.

Purgatives stand next to bloodletting in the list of general remedies for inflammation. They are valuable as adjuvants to bloodletting in subduing high action in inflammation. Purging does not produce that lasting weakness which is so often the consequence of bleeding, hence it is particularly useful in those cases of inflammation, which occur in old and enfeebled persons, or in persons debilitated from any cause, in which case it would be deemed improper to abstract blood. Saline purgatives must lessen the quantity of circulating blood in as much as they increase the secretion from the arteries of the intestines.

Hence they must operate beneficially in the cure of local inflammation upon the same principle as blood letting. The purgatives employed are generally of the mild, laxative class, such as manna, rhubarb, oleum ricini. and all the saline purgatives, these last are in most cases particularly applicable. Purgatives act beneficially when judiciously employed, not only in allaying the the local inflammation, but also in relieving the constipation, heat and restlessness which usually accompany the symptomatic fever.

Nauseating medicines or such as produce sickness have been a good deal employed in inflammation. They act beneficially by lessening for a time arterial action and even the general powers of the system. Nausea always has a tendency to diminish the action of the heart, to produce a general relaxation of the whole animal fiber and consequently a determination to the surface. But these medicines should never be given to the extent of inducing emesis, as vomiting always increases the action of the heart, and thus our object is defeated. Nauseating medicines administered after bleeding has been premised once or twice are often productive of the most beneficial effects. But there are cases in which they cannot be resorted to with prudence, such as inflammation of the stomach and intestines. In these cases the stomach is generally so irritable that it will not retain these medicines, and we have vomiting excited. which it is our object to avoid. In all superficial inflammations however they may be safely and advantageously exhibited, as well as in most cases of inflammatory affections situated internally.

Opium has been employed in inflammatory affections, and highly extolled by some surgeons of great eminence, particularly by Mr. B. Bell and Richter. On the contrary Mr Burns as well as most surgeons of the present day reprobate the practice. I should suppose, however, that when considerable irritation and pain remained after evacuations from the bowels, and by bleeding had been carried as far as was consistent with prudence, that opium combined with antimony ipecacuanha or small quantities of calomel would prove a valuable remedy. Great circumspection however is necessary in the employment of this article; and it should generally be given in large doses, as small ones not only often fail to accomplish the desired object, but frequently have quite the contrary effect.

The patients diet and regimen should in a particular manner claim our attention. He should adhere to a strict antiphlogistic course, all animal food, particularly, that which is calculated to stimulate the system to a certain degree should be refrained from, all fermented and spirituous liquors should be cautiously avoided during all inflammatory affections.— The patient should be confined to his room, rest and an avoidance of whatever has a tendency to produce irritation and excite the action of the heart and arteries should be strictly enjoined in all cases of extensive inflammation. The diet should be composed of the lightest and most easily digested articles, such as barley water, sago, tapioca, arrow root, water gruel, chicken water and, perhaps, a little rice. The drink should be cold water in most cases, or such as are cooling and slightly acidulated, for they have a tendency to remove the thirst and heat

which are so constantly the concomitants of this disorder, and to allay the irritation and sooth the increased action of the whole arterial system. The chamber in which the patient lies should not be warmer than is consistent with comfort, for heat of all things, keeps up the arterial excitement in a most powerful manner. For the same reason, it is evident that the patient should not have a superfluous quantity of bed clothing, but nearly enough to keep him comfortable.

A great many topical remedies have been employed in phlegmonous inflammation. I shall only mention such are most commonly employed, and such as appear to me to be generally productive of the most advantageous effects.

It has been already observed that phlegmon is attended with an increased heat of the part affected. The obvious indication then is to attempt to lessen the temperature of the part by the topical application of cold. This should be applied in such a manner as to keep up a constant evaporation on the surface, so that the heat may be abstracted as fast as it is generated.

For this purpose cold water answers a valuable end; linen cloths wrung out of ice-cold water and applied to the part, and removed as soon as they become warm, and fresh ones applied, diminish the temperature in an eminent degree, even pounded ice itself may be applied, care being taken not to suffer the part to freeze and thus produce disorganization. Various sedative and astringent substances, such as the acetate of lead, the sulphate of zinc, the vegetable acids, particularly the acetic acid have been highly extoled as topical applications in phlegmonous inflammation. They act not only by abstracting the heat

from the part and thus reducing its temperature, but they give tone to the inflamed vessels and enable them to gether up themselves, if I may use the expression, and carry on the circulation with more vigor.

Alkohol and ether have acquired some celebrity as local remedies for inflammation. Their usefulness in this affection is owing to the powerful manner, in which the evaporation of these fluids deprive the inflamed part of its heat. Alkohol may possibly prove useful from its astringent properties.

I should not omit to mention that blisters have been lately recommended by an eminent professor in a neighbouring school. Warm applications have also been advised in inflammation, but in cases in which resolution is our object they rarely have a place.

Inflammation

Every organ and structure of the body is more or less subject to inflammation; and this, if we except fever, of which it is a modification, is perhaps of more common occurrence than any other disease in the whole range of medical inquiry; and it is a disease, the true nature of which, is less understood than any other. It is then very evident to every reflecting mind, that it would be of no small moment for a disease so frequent in its appearance, so formidable in its nature and so little understood, to be more thoroughly investigated and its precise nature ascertained and unfolded to view.

In making these observations, I do not wish it to be understood that it is my intention to enter into an examination of this abstruse subject; far be it from me to presume so much, since the wisest heads and the most profound erudition which the world has ever produced, have, from the earliest period down to the present time, been engaged in this inquiry, and the result of all their labours has only been to involve the subject in more difficulties and perplexities, owing to the numerous theories which have been started and defended by men of the most splendid talents and acquirements.

All that I can do then, is to express a wish that the inquiry may be pursued with unceasing diligence and perseverance by the medical world, untill the true theory of inflammatory action shall be fairly discovered and brought to light; and in the meantime, to make some remarks

on two or three of the most prominent theories, and then give my sentiments with regard to the one which I think the most plausible, together with some observations on the causes, symptoms, terminations and treatment of external inflammation or that which takes place on, or near the surface of the body, and which comes more directly under the province of the chirurgical department of medicine.

The remote causes of inflammation are very numerous and various, but may, I think, be reduced to two classes; namely, those which operate by their stimulant or chemical qualities; such as heat and other irritants; and those which produce their action upon the part, by their mechanical agency, such as contusions, stretching of the muscular fibers, wounds &c. The manner in which cold acts in the production of inflammation has been a matter of great controversy among pathologists, some contending for its stimulant operation, while others, with much more plausibility rank it among the sedatives. Cold as a sedative may operate in two ways, 1st. by being applied in a great degree and for a long time to any part, it destroys its vitality, and we have what is commonly termed sloughing; but if the application be of a less degree, and of short duration, it only produces a weakness of the vessels of the part, and then by the intervention of some stimulant, as heat for instance, inflammation is excited.

"The production of inflammation by any agent, says M. Burns, depends in a great measure on the suddenness of

the operation of the agent, by which it is excited; for a quantity of stimulus, which, if suddenly applied would produce inflammation, may be applied slowly with impunity. Hence we may infer that any given stimulant when applied to a part previously deprived of a portion of its vitality will be much more apt to produce inflammation than when applied to a part which was sound and had suffered no injury. Hence when slight stimuli are applied to a part which has been weakened by cold, they almost invariably excite inflammation. Fever very frequently becomes the remote cause of local inflammation, and is always a consequence of it in a greater or less degree, hence it has been observed by an author of great celebrity, that we may have a fever without inflammation, but we can not have inflammation without fever. Again, inflammation appears sometimes to arise spontaneously or without any perceptible exciting cause.

Various are the opinions which have been promulgated to the world with regard to the proximate cause of inflammation. Theory after theory has been built up and published, each supported, for a time, by its able, ingenious and zealous advocates, until unable to resist the impetuous tide of opposition, they have almost all been swept into the abyss of oblivion. Two theories, however, remain yet very much in vogue. The one attributes the proximate cause of inflammation to an increased action of the vessels of the part; while the other attributes it to a weakened state of the part, and consequent inability of the vessels to per-

form their accustomed functions. The latter of these theories, I think, is much the more plausible.

During the time that the circulation of the blood remained a mystery, and the preposterous opinions of the power of the liver in preparing and sending forth this fluid, continued to prevail, it is not at all astonishing that the different theories of medicine should be very various and imperfect. We learn that the anatomists of the ancients taught the doctrine that the liver was the great organ of the circulation, from which the blood went forth by day to the different parts of the body and returned again at night.

The illustrious Boerhaave inculcated the doctrine that inflammation was occasioned, by what he termed an error loci; that is, that there was an obstruction to the free circulation of the blood in the minute vessels of the part, induced by the red particles of blood being propelled by the action of the heart into vessels which from some cause had been previously injured and of consequence had suffered some dilatation; but which were too small to receive them conveniently, and thus, they became choaked up and unable to free themselves of their contents. This obstruction was imagined to occasion a resistance in the circulation of the part affected, thereby increasing it in the vessels of other parts, and thus proving an irritant to the heart, and augmenting the force of the blood in the part of the vessels immediately behind the obstruction. This caused the

pain and heat, while the accumulation of blood produced the redness, the three principal symptoms of inflammation. This theory of Boerhaave approached much nearer to the truth, than a great many of those, which have been published since his time.

That inflammation is produced by an obstruction in the circulation of the blood in the minute vessels of the part, I think there can be but little doubt. And this obstruction is owing to certain agents acting mechanically or chemically on the part, so as to induce a weakness of the vessels, by which, they are rendered unable to perform their accustomed office of conveying the circulating fluids sent to them by the impulse of the heart. The walls of the vessels are weakened, in consequence of which they are unable to resist the force of the fluid which is poured into them; they yield at this injured part and become dilated, and the blood being continually sent further, an accumulation takes place in the part.

Baron Boyer and many others considered the proximate cause of inflammation to be an increased action of the vessels of the part; but this supposition is, in my opinion, without foundation, in as much as they all agree that there is more blood than usual in the part affected. Now from this circumstance alone, I should suppose, that instead of an increase, there would be evidently a diminution in the impetus of the blood in the inflamed part: and I think reason will bear me out in this supposition. It is evident to every reflecting mind that no topical

congestion can take place without a diminished impetus — a remora or obstruction of some kind in the part, therefore it is impossible that it can occur under an increased impetus. Were the impetus of the blood in every part of the vessels the same, the blood would be necessarily equally diffused through the whole; were it in any part increased, it would appear in a diminished proportion in that part. It will appear then from this reasoning, that wherever the impetus is preternaturally increased, there the quantity of blood is diminished, and vice versa.

In order to illustrate this position, I will resort to a very familiar comparison, which I believe has been made before. The current of blood may be very aptly compared to the current of a river. They both consist of a fluid in agitation. Now to what place would we go to look for an accumulation of water in the stream. Would we go to its rapids, where the declivity was greatest and the force of the water consequently increased, and much more shallow? Surely no! We should go to some low and level spot, where the water was slow in its motion and the impetus weak and sluggish; and it is here alone, that we may reasonably expect to find the water preternaturally accumulated in a given space.

But as well might we expect to find an inordinate collection of water in the declivity of the rapids of a river, as to find a congestion of blood in any part where the impetus was increased.

So far I have reason on my side; and I think,

the result of experience is no less favourable. When examined with a magnifying glass, we are informed that the movement of the blood through an inflamed part, is preternaturally slow. In cases of great violence, the parts are so disabled and weakened, that the motion of the blood is scarcely perceptible; the stagnation is so great, some times, that it is observed to exchange its arterial for a venous colour, so as to assume a purplish hue, as in the commencement of mortification.

That it depends on a diminution and not on an increase of action, I think, is manifest from the nature of the remote causes, all of which are calculated to lessen the vigour of the parts. Inflammation then can not take place until the part has previously undergone some injury so as to lessen the power of action in the vessels.

On no principle whatever can the long and continued application of cold, a severe contusion or a wound be said to increase the energy of a part; on the contrary, their debilitating effect is often experienced even by the person himself. Therefore we must conclude that inflammation depends not on an increased action, but a weakened state of the vessels, by which they are rendered incompetent to free themselves of the fluid sent to them by the impulse of the heart.

Notwithstanding all these proofs that inflammation consists in an obstruction, or weakening of the vessels, which to my mind, are very satisfactory, we find men whose genius and talents have shed lustre upon science

still persisting in the preposterous doctrine, that it is owing to an increased action.

Professor Thompson of Edinburg believed that the arteries possessed a faculty of dilating themselves; and as a proof of this opinion, he brought forward the circumstance of the vessels of the uterus becoming enlarged during gestation. But this condition of the vessels of the womb is very different from that in inflammation. In the one case, we have a natural process, a certain indication to fulfil, for the accomplishment of which, it is absolutely necessary that these vessels should increase in their dimensions; the foetus in utero would never arrive at maturity unless this were the case. Whereas, in the other case, we have a morbid state of the vessels of the inflamed part, induced by the action of some foreign agent rendering the vessels unable to resist the force of the blood, and thereby causing them to dilate.

The next theory which I shall notice, is that of the justly celebrated Dr. Cullen. He attributed the proximate cause of inflammation to a spasm of the extreme vessels. "A spasm of the extreme arteries, supporting an increased action in the course of them, may, therefore be considered as the proximate cause of inflammation; at least, in all cases not arising from direct stimuli applied; and even in this case, the stimuli may be supposed to produce a spasm of the extreme vessels." Here we have the words of Cullen himself. Of this theory I shall say nothing, but content myself with simply quoting the following words from Dr. Burns, which

I think will be amply sufficient.

" The inconsistencies in Cullen's theory are very glaring. The congestion or accumulation of blood, which is only an effect or consequence of inflammation, is set down as the cause of the spasm of the vessels, to which spasmodick constrictions, Cullen, strangely enough, assigns the name of proximate cause. The spasmodick contraction of the extremities of the vessels, instead of propelling the accumulated quantity of blood, would render the passage of the blood from the arterial into the venous system still more difficult. Spasmodick constriction of the small vessels, is so far from being a satisfactory explanation of the proximate cause of inflammation, that even tying a large artery does not of itself bring on this affection. "

There are a great many other theories, which I think, it would be useless to mention, and would be time unprofitably and unnecessarily employed in examining. But among these, are the opinions promulgated to the world by that prodigy of genius and learning, the late Mr. John Hunter, whose talents and indefatigable industry have done more for the promotion of medical science, than perhaps, any other man England ever produced. But I think, if I may be allowed to give my opinion with regard to so great a man, that his notions respecting the pathology of inflammation, like many others advanced by him, are totally unfounded. To enter into a minute examination of every part of this great man's theory, would consume more time than we feel disposed to devote to the subject at present. I shall

therefore pass him over in silence and leave this investigation to some person whose talents are better calculated to perform this duty than myown.

I shall now proceed to notice more particularly the symptoms of common inflammation.

These consist in an increased sensibility of the part, redness, tumefaction, heat and pain; and sometimes an unusual pulsation is felt in the part affected.

The redness is evidently owing to two causes. First and accumulation of blood in the part; more blood must necessarily be contained in the part, owing to the augmentation of the vessels. Second, the minute vessels, which had before been accustomed to carry only serum or lymph are now found by their inordinate dilatation, to contain red particles of blood. Many have supposed that the redness in common inflammation was partly occasioned by the formation of new vessels, but this doctrine, however, is extremely problematical. Another reason assigned for the redness is, that the blood after becoming venous retains its scarlet or arterial hue.

Tumefaction— This is produced by several causes. The first is the preternatural accumulation of blood in the distended vessels. The second is the effusion of serum into the cellular texture, and the deposition of new matter. The third, the interruption of absorption in the vessels of the part, of late particularly noticed.

Pain— This is probably induced by the unnatural distention of the part, by which the muscular fibers are, as it

were put upon the stretch and of course the nerves extended so as to excite a certain uneasiness termed pain.

Heat was supposed by many of those who rote after the discovery of the circulation, by the immortal Harvey, to be produced by the friction of the blood against the walls of the vessels. But modern phylosophy has long since exploded this doctrine, in as much as it proves incontestably, that a fluid may pass through a tube with the utmost velocity for thousands of years without increasing the temperature in the smallest degree. The most generally received opinion, among the more modern writers, is, that the blood in passing from the venous to the arterial state has its capacity for calorc increased, or in other words absorbs heat, and when, in its course, it arrives at the capillary vessels, there it combines with a certain something, which lessens its capacity for heat and causes it to give out a portion of this heat, and as there is a greater quantity of blood in the part than usual, it follows as a natural consequence that the heat in this particular part is preternaturally increased. For where there is most blood, there we will find most heat, and therefore it is evident the heat at this part can never exceed that of the blood at the heart.

In the enumeration of the symptoms of inflammation we mentioned that there was sometimes an unusual sense of throbbing in the affected part. This we can account for in no other rational manner than by the efforts of the heart to propel the blood, which opposed by the resistance of this fluid congested in the inflamed part.

Inflammation terminates generally in three different

ways, or to speak perhaps more correctly, after this process has run a certain course, it subsides entirely without any alteration in the state or texture of the part, or it induces in the extreme vessels a disposition to assume a new action, and instead of performing their accustomed function, they now secrete an opaque viscid fluid called pus, or if neither of these takes place, we have then the third termination, which consists in an entire disorganization of the part.

When inflammation is to end in the first manner the pain becomes less and the tumefaction subsides; the heat abates, the part gradually assumes its former colour, and in a word, all the febrile symptoms in a short time disappear and the part is restored to its former health and vigour. There is no suppuration nor change in the ordinary structure and organization of the part. This termination has been designated by the term resolution. It is fortunately, for the good of mankind, the most frequent and most favourable termination of all others.

When notwithstanding all our efforts to subdue this affection in the commencement, and in defiance of all our remedies, the pain, heat, and redness instead of diminishing, constantly increase, and all the febrile symptoms become aggravated, the pain which was in the first instance of the acute kind, changes to that of the throbbing, and becomes more distinctly connected with the pulsation of the arteries; and if together with these symptoms, the patient complains of the sensation of chilliness in different parts of the body, we may be assured of the approach of the second termination or the stage of suppuration

When pus is completely formed the pain in general entirely ceases, and there is a sense of weight about the part. The tumor becomes enlarged and soft, and if the matter be situated immediately under the skin, assumes a smooth pointed form. There is an evident fluctuation perceived on applying the finger to the part, and the red colour, for the most part, disappears.

There is a circumstance with regard to the formation of pus, which is worthy of observation, and which we should not omit to take notice of in this place; that is the universal tendency which which matter thus collected has to approach the surface and thus discharge itself through the skin, a wise provision of nature, no doubt, to prevent the accumulation of the fluid in the internal cavities of the body, the consequence of which would be a disturbance of all her operations, and eventually, perhaps, the death of the patient.

It has been urged by some, and with a great deal of plausibility, that this takes place in consequence of the greater vitality of the parts nearest the center of the circulation, that these parts, of course, receive more blood, their strength and vigor are consequently increased, and their ability to resist the operation of the pus thus formed, is more considerable. Whereas the parts more distantly situated receive a comparatively small portion of blood; they are weaker and consequently more disposed to yield to the pressure of the confined fluid. This is certainly a very ingenious theory, and one which should be respected by every person, more particularly since it is advanced by men whose talents must command the respect and veneration

of all. But in the present state of knowledge, I must confess, that I am more disposed to refer it to a general law of nature.

The third, most formidable and happily the least frequent termination of inflammation is the death or entire disorganization of the part. This happens generally from the excessive inflammatory action of the first stage, so weakening and destroying the tone of the vessels as to render it impossible for them to recover themselves, and resume their wonted action, the consequence of which is the destruction of the part supplied by these vessels. In the commencement of this disaster, when it extends only to the cellular texture, the parts are said to be in a state of gangrene. but when its destructive ravages pervades the muscles and blood vessels also, of the part, the disease is then said to be in a state of sphacelus. Dr Cullen has refered the cause of gangrene to a putrid ferment diffused through the mass of blood, I feel, though with due deference, to so high authority, disposed to doubt this. I repeat it, that, according to my judgement, the source of gangrene and sphacelus is to be refered purely to a want of sufficient vitality in the solids, no putrid ferment excists in the blood.

In inflammation, the tendency to gangrene may be apprehended from the excessive degree of heat and pain in the inflamed part attended with violent pyrexia

The actual approach of gangrene may be known by the colour of the part changing from a bright vermilion to a dark red; the cuticle separates and forms small vesicles filled with a thin fluid; all pain ceases; the part becomes soft flaccid and insensible; in this state, if you ask your patient how he